

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK**

MICHAEL ANASTASIO, ALAN HARRY,  
LEVANTE CAPITAL, LLC, and PUBLIC  
UTILITY DISTRICT NO. 1 OF CLARK  
COUNTY, WASHINGTON (D/B/A CLARK  
PUBLIC UTILITIES), on behalf of themselves and  
all others similarly situated,

Plaintiffs,

vs.

TOTAL GAS & POWER NORTH AMERICA,  
INC. and JOHN DOES 1-50,

Defendants.

No. 1:15-cv-09689

AMENDED CLASS ACTION  
COMPLAINT

JURY TRIAL DEMANDED

Plaintiffs Michael Anastasio, Alan Harry, Levante Capital, LLC and Public Utilities District No. 1 of Clark County, Washington (d/b/a Clark Public Utilities) (collectively, “Plaintiffs”) bring this action individually and on behalf of all those similarly situated, as defined below, based upon knowledge as to themselves and their own acts, and upon information and belief as to all matters, against Defendant Total Gas & Power North America, Inc. and other John Doe defendants that are currently unknown to Plaintiffs, as follows:

**NATURE OF THE ACTION**

1. This action arises from the unlawful and intentional manipulation of natural gas prices and false reporting by Defendant Total Gas & Power North America, Inc. (“TGPNA”). During a period between at least June 1, 2009 and June 30, 2012 (the “Class Period”), Defendants manipulated monthly index settlement prices of natural gas, at minimum, at four major trading locations in the southwestern and Texas regions of the United States, including the El Paso Natural Gas Co., Permian Basin (“Permian”), El Paso San Juan Basin (“San Juan”),

Southern California Gas Co. (“SoCal”), and West Texas, Waha (“Waha”) (collectively, referred to hereinafter as “relevant hubs”). As described more fully below, this conduct manipulated markets beyond these four trading locations and directly impacted a multitude of physical and financial natural gas contracts.

2. The natural gas market has a significant effect on the United States economy and on the individuals who rely on the fuel for electric generation, manufacturing, heating, cooking and other purposes. The Department of Energy’s Energy Information Administration (“EIA”) estimates that natural gas supplies 27 percent of the energy used in the United States.

3. In the United States, the natural gas market is an interconnected amalgamation of regional markets, with prices for natural gas varying with the demand characteristics of the market, as well as the region’s access to different supply basins, pipelines and storage facilities. The differential value between natural gas prices at one delivery point compared to the natural gas futures prices traded on the New York Mercantile Exchange (“NYMEX”) is known as “basis.” Different delivery points for natural gas have different basis points that reflect the supply and demand characteristics of a particular regional submarket. This basis is reflected in prices for the physical market for natural gas in addition to prices for financial products linked to natural gas, such as swaps and other derivative contracts. Prices for natural gas emanating from the Henry Hub in Louisiana, the point of delivery for NYMEX futures, have become the standard basis reference point, because Henry Hub is the most liquid and active of the physical and futures markets. Natural gas prices are often quoted as a “differential” between prices at the Henry Hub and another regional hub. In this way, Henry Hub prices can impact prices at regional hubs, and *vice versa*. Futures trades for regional hubs are linked to the Henry Hub through a swap or other tradeable products due to the depth and liquidity of the Henry Hub

market.

4. The pricing relationships between different U.S. physical natural gas regions are closely and inextricably linked. Consequently, changes in basis in one market are reflected in prices in another market. Further, because the prices of financial natural gas instruments (such as futures, options, swaps, and other derivative instruments) are inextricably linked to the prices of physical natural gas contracts – to manipulate physical natural gas prices is to necessarily manipulate financial natural gas prices, and *vice versa*. As described more fully below, it is easier to manipulate prices at regional natural gas hubs that have less trading volume.

5. The prices for physical natural gas are based on “fixed-prices” or “index prices”. Both pricing methods call for the prompt delivery of natural gas at a specified delivery location. Fixed-price transactions are negotiated by the buyer and seller and priced at the time of the transaction. The prices for index transactions, on the other hand, are determined each month by trading information reported to trade publications, such as Platts’ (“Platts”) *Inside FERC Gas Market Report* and Natural Gas Intelligence’s (“NGI”) *Bidweek Survey* (collectively, “trade publications”).

6. Both Platts and NGI publish monthly index prices based on the volume-weighted average price of all reported fixed-price physical natural gas transactions occurring during the monthly settlement period known as the “bid-week.” Bid-week refers to the natural gas industry’s monthly settlement period and consists of all reported fixed-price transactions occurring during the last five business days of each month. As discussed herein, these monthly index prices are factored directly into the price of natural gas financial products, including but not limited to futures and options contracts.

7. In recent months, the Federal Energy Regulatory Commission (“FERC”) and the

Commodity Futures Trading Commission (“CFTC”) announced investigations into TGPNA’s manipulation of natural gas prices in the southwestern region of the United States. More specifically, TGPNA engaged in, *inter alia*, a manipulative scheme to execute numerous fixed-price trades during bid-week recklessly and with the intent to create artificial bid-week prices to advantage their financial natural gas positions. Statistical analysis by Plaintiffs’ Consulting Expert confirmed this alleged manipulation. Plaintiffs’ Consulting Expert also determined that TGPNA manipulated prices of natural gas at hubs specifically targeted by TGPNA’s traders, as well other natural gas hubs, including at least the Henry Hub, and recklessly or deliberately intended to report false and misleading information regarding their natural gas trades. These trades were far in excess of TGPNA’s needs and were intended to skew the price of natural gas and influence the price of natural gas futures, options and swaps traded on NYMEX and ICE. In sum, TGPNA’s manipulation resulted in artificial prices and price trends, which were and continue to be in violation of the Commodities Exchange Act, 7 U.S.C. § 1, *et seq.* TGPNA’s actions also constitute antitrust violations under Section 2 of the Sherman Act and Section 4 of the Clayton Act.

8. This manipulative strategy caused harm to Plaintiffs and other similarly situated Class members, who transacted in natural gas physical, financial and related derivative contracts at artificial prices. Prices of commodity futures, options and swaps contracts are inextricably linked to, *inter alia*, natural gas spot prices and price trends.

9. During the Class Period, TGPNA’s West Trading Desk transacted in both financial and physical natural gas products, both on-exchange and through direct negotiations with other market participants in the over-the-counter bilateral market. TGPNA, however, had no material customer business, physical assets, or transportation at

the relevant hubs during the Class Period.

10. During the Class Period, bid-week transactions were an important component of TGPNA's trading strategy, and TGPNA was an active participant, both as a seller and purchaser, in the southwestern and Texas regions' natural gas markets. TGPNA's Houston-based, West Desk reported its physical fixed-price bid-week transactions to Platts and NGI. Natural gas market participants, including producers and end-users, used monthly index prices to market their gas and to determine their risk.

11. Defendants' fixed price trading during the bid-week accounted for a substantial percentage of the total market by volume at the relevant hubs even though TGPNA had no material customers, assets, or transportation in the southwestern region of the United States. However, as the largest player in the fixed-price market during these periods, Defendants affected the monthly index settlement prices to benefit TGPNA's related financial or "paper" positions, including basis swap, index swap and NYMEX futures positions (collectively, "financial position(s)").

12. Given the secret nature of TGPNA's manipulative scheme, Plaintiffs believe that further evidentiary support for the allegations in this Complaint will be unearthed after a reasonable opportunity for discovery.

### **JURISDICTION AND VENUE**

13. This action arises under Section 22 of the CEA, 7 U.S.C. § 25, and Section 2 of the Sherman Antitrust Act, 15 U.S.C. § 2 and Section 4 of Clayton Act.

14. Natural Gas is a "commodity" in interstate commerce and is the "commodity underlying" natural gas futures and options contracts and swaps contracts traded on the New York Mercantile Exchange ("NYMEX") and the ICE Futures U.S Exchange, as those terms are defined and used in Sections 1(a)(4) and 22 of the CEA, 7 U.S.C. §§ 1a(4) and 25(a)(1)(D),

respectively.

15. This Court has jurisdiction over this action pursuant to Section 22 of the CEA, 7 U.S.C. § 25, Section 2 of the Sherman Antitrust Act, 15 U.S.C. § 2, Section 4 of the Clayton Act, 15 U.S.C. § 15, and 28 U.S.C. §§ 1331 and 1337, respectively.

16. Venue is proper in the Southern District of New York, pursuant to Section 22 of the CEA, 7 U.S.C. § 25(c), Section 4 of the Clayton Act, 15 U.S.C. § 15, and 28 U.S.C. § 1391(b)-(d). TGPNA is registered to conduct business in New York, and a substantial part of the events or omissions giving rise to the claims occurred in this district. Defendants' unlawful acts manipulated the prices of natural gas physical contracts and derivative products traded in this District.

17. Defendants, directly and indirectly, singly and in concert, made use of the means and instrumentalities of transportation and communication in, or the instrumentalities of, interstate commerce, or of the mails in connection with the unlawful acts and practices and course of business alleged in this Complaint.

## **PARTIES**

### **A. Plaintiffs**

18. Plaintiff Michael Anastasio ("Anastasio") was at all relevant times a New York resident, and he transacted in natural gas financial products on U.S. exchanges, including NYMEX, during the Class Period.

19. Plaintiff Alan Harry ("Harry") was at all relevant times a New Jersey resident, and he transacted in natural gas financial products on U.S. exchanges, including NYMEX, during the Class Period.

20. Plaintiff Levante Capital, LLC ("Levante") is, and was at all relevant times, an Illinois limited liability company with its principal place of business in Chicago. Levante

transacted in natural gas products on U.S. exchanges, including NYMEX and ICE, during the Class Period.

21. Plaintiff Public Utility District No. 1 of Clark County, Washington (d/b/a Clark Public Utilities) (“Clark PUD”) is a customer-owned utility providing electric and water service in Clark County, Washington. Clark PUD is a municipal corporation formed by a vote of the people in 1938 which had, as of year-end in 2014, 192,584 customers, operating revenue of over \$375 million, and over five million megawatt hours of electricity sales. Clark PUD transacted in physical and financial natural gas contracts during the Class Period.

## **B. Defendants**

### **1. Total Gas & Power North America, Inc. (“TGPNA”)**

22. Defendant **Total Gas & Power North America, Inc. (“TGPNA”)** is headquartered in Houston, Texas. TGPNA is an indirect, wholly-owned subsidiary of Total S.A. TGPNA or its predecessors have been engaged in natural gas physical and financial trading and marketing activities in the U.S. since 1990 (prior to August 1, 2003 TGPNA was known as TotalFinaElf Gas & Power North America, Inc.). TGPNA is a Delaware corporation and is registered to conduct business in the State of New York as a foreign business corporation, and has consented to accept process of service through a registered agent. TGPNA and its predecessors have been registered to conduct business in the State of New York since 1997. TGPNA currently trades natural gas, petcoke, natural gas liquids (“NGL”) and liquefied natural gas (“LNG”) in the U.S. and worldwide markets. Activities include all trading, marketing and other commercial activities necessary to optimize market access for Total S.A.’s current and future natural gas production and reserves. TGPNA owns 1.0 Bcf/day (10.0 Bcm/year) of regasification capacity at the Sabine Pass LNG terminal in Louisiana. TGPNA will also purchase up to 3.2 million tons of LNG in the gulf coast for export in worldwide markets.

TGPNA markets and optimizes significant quantities of natural gas & NGLs from equity and third party production out of the Utica and Barnett Shale plays. Due to its size, geographically-balanced trading portfolio and trading expertise, TGPNA is able to optimize U.S. market access for Total S.A.'s natural gas production and for its LNG trading and marketing business and has become a top-tier natural gas trading and marketing company in the U.S.A.

23. TGPNA's North American trading operations often are referred to as the "West Desk" and are based out in Houston, Texas. Therese Tran ("Tran") is a TGPNA natural gas trader in Houston, Texas. Tran, formerly known as Therese Nguyen, was the manager of TGPNA's trading desk operating in the southwestern and Texas regions of the U.S. ("West Desk") during the Class Period. Aaron Hall ("Hall") was another senior West Desk trader and supervisor.

## **2. John Doe Defendants**

24. Defendants John Does 1-50 are persons and entities employed by or affiliated with Defendants or others that directly or indirectly inappropriately influenced or attempted to influence the trading and price of natural gas or natural gas related derivative instruments. The defined term "Defendants" also includes John Doe Defendants.

## **3. Agents and Unnamed Affiliates**

25. During the Class Period, TGPNA's subsidiaries or other affiliates of Defendants joined and furthered the unlawful conduct by trading physical and financial natural gas contracts, at manipulated prices not reflecting fundamental supply and demand, to the direct benefit of TGPNA and other Total affiliates.

26. Whenever reference is made to any act of any corporation, the allegation means that the corporation engaged in the act by or through its directors, officers, employees, or agents



while they were actively engaged in the management, direction, control, or transaction of the corporation's business or affairs.

27. Each of Total's affiliates acted as the agent of, or participated in a joint venture, for the other Total affiliates, including TGPNA, with respect to the acts, violations and common course of conduct alleged herein.

**C. Other Relevant Entities**

28. Defendant TGPNA is an indirect wholly-owned subsidiary of Total S.A. ("Total"), which is headquartered in Courbevoie, France. Together with its subsidiaries and affiliates, Total is the fourth largest publicly-traded integrated international oil and gas company. With operations in more than 130 countries, Total is engaged in every sector of the oil industry, and also operates in the power generation and renewable energy sectors. Total affiliates work closely together. For example, TGPNA trades natural gas and natural gas liquids that are produced by another Total affiliate, Total E&P USA. Total and its affiliates use various instruments such as futures, forwards, options and swaps on exchanges or over-the-counter markets to hedge against fluctuations in the price of crude oil, natural gas and other energy products.

29. In support of its natural gas businesses, Total has gas and power trading teams located around the world, with trading desks located in Houston, as well as in London, Geneva and Singapore, and conducts most of its business through wholly-owned subsidiaries including TGPNA.

30. Total's gas and electricity trading operations in Europe and North America sell Total and its affiliates' production, supply Total's gas marketing subsidiaries and support other activities of Total and its affiliates. During the Class Period, Total's North American natural gas and trading operations were extensive. For example, Total marketed approximately 1,256

Billion Cubic Feet (“Bcf”) (36 Bm3) of natural gas in 2012.

## SUBSTANTIVE ALLEGATIONS

### A. Factual Background

#### 1. Natural Gas Markets in the United States

31. The energy commodity markets, including natural gas markets, are global and complex. Prices in natural gas markets have a significant effect on the U.S. economy and on the individuals who rely on natural gas as an energy source in their businesses and homes. Natural gas markets have a significant effect on the economy and on the individuals who rely on the fuel for electric generation, manufacturing, heating, cooking and other purposes. The Department of Energy’s Energy Information Administration (EIA) estimates that natural gas supplies 27 percent of the energy used in the United States.

32. The natural gas market is an integrated and interrelated system of subsidiary markets. There is a physical market, in which natural gas is produced, transported, stored and consumed. There is also a financial market in which physical natural gas is bought and sold as a financial product derived from physical natural gas. Although natural gas markets are often thought of as regional, with prices for natural gas varying with the demand characteristics of the market and the region’s access to different supply basins, pipelines and storage facilities, in fact, prices between the physical and financial markets are closely linked, and prices between regional markets are closely linked. This link is caused, in part, by hedging transactions that market players employ to offset their price risk at these hubs. Often these hedging transactions use Henry Hub and the futures markets, because these markets are relatively more liquid.

33. The natural gas industry has three segments: i) the *supply segment* includes exploration and development of natural gas resources and reserves, and production, which includes drilling, extraction and gas gathering; ii) the *midstream sector segment* refers to the

small-diameter gathering pipeline systems that transport the gas from the wellhead to natural gas processing facilities, where impurities and other hydrocarbons are removed from the gas to create pipeline-quality dry natural gas; and iii) the *transportation segment* consists of intrastate and interstate pipeline systems that move natural gas through large-diameter pipelines to storage facilities and a variety of consumers, including power plants, industrial facilities and local distribution companies (“LDCs”), which deliver the natural gas to retail consumers.

34. Hubs are key integral parts of the natural gas pipelines. Hubs are the specific points where pipeline interconnections allow the transfer of gas from one pipeline to another. There are dozens of natural gas hubs in the country. The following chart provides the location of the top 25 natural gas hubs in North America.<sup>1</sup>



<sup>1</sup> “Understanding Natural Gas Markets”, American Petroleum Institute, Sept. 2014, at 17, *available at*: <http://www.api.org/~media/Files/Oil-and-Natural-Gas/Natural-Gas-primer/Understanding-Natural-Gas-Markets-Primer-Low.pdf>.

35. The Henry Hub has become the dominant benchmark point in the physical natural gas market because of its strategic location in the Gulf Coast's producing area and the number of pipeline connections to the East Coast and Midwest consumption centers. The Henry Hub is located in south central Louisiana, in the town of Erath, where more than a dozen major natural gas pipelines converge and exchange gas. The Henry Hub has 12 delivery points and 4 major receipt points. Gas as a physical product can be bought and sold at the Henry Hub or other hubs around the country in daily and monthly markets. In addition, NYMEX established a natural gas futures contract centered on Henry Hub prices in 1990, which has gained widespread acceptance and is often used as the reference price for natural gas in the United States. In addition, ICE offers the world's most heavily traded natural gas contracts, including Henry Hub futures, cash settled basis futures, cash settled swing futures and NG options.

36. While the Henry Hub is the most prominent natural gas hub and serves as a pricing reference point for the vast majority of the North American natural gas market, other natural gas hubs have also become important natural gas trading points. The Permian, San Juan, SoCal and Waha are examples of such hubs. At these hubs, market participants trade physical natural gas in an active "spot" market under longer-term contracts with fixed pricing or terms that track market prices, and under contracts with other types of pricing provisions. As stated, price changes in regional hubs impact prices at the Henry Hub. Because trading volume in other hubs is so much smaller, it is relatively easier to engage in market power manipulation in these hubs, with a consequent impact on Henry Hub and futures prices based on Henry Hub.

## **2. Spot (Cash) Market Trading of Natural Gas**

### **a) General Overview**

37. The North American natural gas marketplace has a highly active spot, or cash market, where brokers and others buy and sell natural gas daily. The daily spot market for

natural gas is active, in that trading can occur 24 hours a day, seven days a week. Some of these points are market centers, where brokers actively trade and prices are established. Spot market transactions are normally conducted on electronic exchanges or by telephone, with the buyer agreeing to pay a negotiated price for the natural gas to be delivered by the seller at a specified delivery point the next day. In addition to these market centers, natural gas is actively traded at many other locations, including segments of individual pipelines and locations where pipelines interconnect with LDCs.

38. Natural gas spot prices reflect daily supply and demand balances and can be volatile. Several publications, such as Platts Gas Daily, Natural Gas Intelligence and Natural Gas Week, survey the market for daily transaction prices that are used to form and publish a daily index that is made available the night before or the morning of the next business day.

39. In general, gas trading at other U.S. locations (outside of Henry Hub) may trade either at prices that are higher or lower than Henry Hub, depending on regional market conditions and available transmission capacity between locations. These positive or negative differentials to Henry Hub are known as “basis differentials”. For example, if natural gas from a hub is more expensive than the Henry Hub, the differential will reflect a “premium”. The converse is also true. If natural gas from a hub is less expensive than the Henry Hub, the differential will reflect a discount. The basis differentials will fluctuate over time and seasonally. For example, prices for natural gas in the SoCal hub located in southern California will trade both above and below the cost of gas at Henry Hub throughout the year. Basis risk is an important consideration in North American gas markets because the price differentials between different locations can vary significantly over time, sometimes (albeit rarely) as much or more

than the volatility in prices at Henry Hub.<sup>2</sup> As discussed below, basis swap contracts are traded at many locations that allow market participants to lock in a transportation cost from Henry Hub to the receipt location.

**b) Reported Trading During the Bid-Week Forms the Basis for Index Prices**

40. During the last five business days of each month, producers sell their core production and consumers buy natural gas for their core needs for the upcoming month. This five-day period is commonly referred to as the “bid-week” for the prompt or upcoming delivery month. While natural gas trade publications survey the market for daily transaction prices that are used to form and publish daily indices that are made available the night before or the morning of the next business day, their surveys of bid-week prices are of particular importance. This is because bid-week prices are converted into monthly locational price indexes that are available on the first business day following the last day of bid-week. As discussed below, these spot market prices are directly incorporated into the pricing of natural gas financial products, such as futures and other related derivative contracts.

41. Platts’ *Inside FERC Gas Market Report* and NGI’s *Bidweek Survey* are two of the more prominent trade publications that publish price assessment surveys. Both Platts and NGI publish monthly index prices based on the volume-weighted average price of all reported fixed-price transactions occurring during the -week. In order to calculate its monthly index prices, Platts requests that market participants provide the following information:

For the monthly bidweek price survey, bidweek is the last five business days of each month as defined by Platts. For each day of bidweek, Platts encourages that all entities report all fixed-price physical deals negotiated that day for delivery

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<sup>2</sup> See generally, F. Graves and S. Levine, “Managing Natural Gas Price Volatility: Principles and Practices Across the Industry”, The Brattle Group, Nov. 2010, at 11, *available at*: <http://www.cleanskies.org/wp-content/uploads/2011/08/ManagingNGPriceVolatility.pdf>.

throughout the next month. Also report all physical basis deals in which the basis value is negotiated on any bidweek day prior to and including the day the near-month NYMEX gas futures contract settles and the price is set by the final settlement value of the NYMEX contract plus or minus the negotiated basis.

42. Similarly, NGI requests that market participants provide the following information:

- Report all negotiated, fixed-price, non-affiliate natural gas transactions for both daily “day-ahead” and monthly (bidweek) “baseload” delivery.
  - Daily data include all fixed price deals done each business day (where a business day is any day the Intercontinental Exchange offers trading of daily/next day physical gas) before the 12:30 p.m. Eastern pipeline nomination deadline for gas to flow the next day or over the weekend, as is the case on Fridays.
  - Monthly bidweek data include transactions done at the end of each month for gas to be delivered for the entire following month. A five-day bidweek trading period includes the last five trading days of a particular month, where a trading day is defined as any day the Intercontinental Exchange (ICE) is trading physical natural gas. . . .
  - Physical basis deals done during bidweek should be denoted as such and included.<sup>3</sup>

### **3. Financial Trading of Natural Gas**

#### **a) The Prices of Physical and Financial Natural Gas Markets are Inextricably Linked**

43. Natural gas market participants often hedge their risk or speculate in natural gas by trading commodity futures, options and swaps tied to the price of natural gas. During the Class Period, Defendant TGPNA traded natural gas physical and financial derivative contracts.

44. Like physical natural gas, natural gas futures contracts are an independent, stand-alone commodity. Natural gas futures contracts are the third-largest physical commodity futures contract in the world by volume, and they are widely used as a benchmark price for

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<sup>3</sup> See “NGI’s Price Index Methodology Point-By-Point Index Descriptions and Code of Conduct Statement: Updated August 2015” at 3, *available at*: <http://www.naturalgasintel.com/ext/resources/Daily-GPI/NGIMethodology.pdf>.

natural gas. The prices of physical and futures natural gas contracts are inextricably linked. As expectations about the value of natural gas at the time of delivery change, the value of natural gas futures and options contracts will likewise change. Prices of natural gas futures contracts fluctuate significantly and rapidly with changes in expectations about future physical (spot) supply and demand.

45. Generally, a commodity futures contract is an agreement for the purchase or sale of a particular commodity for delivery on a fixed date in a future month. The nearest delivery month for a futures contract is known as the “near” or “prompt” month. Trading of a near month natural gas futures contract is available until a fixed expiry date, after which that month’s contract is no longer available to trade, and the subsequent month becomes the new near month for trading purposes.

46. During the Class Period, the futures market for natural gas reached record volumes, with the annual volume increasing from less than 40 million traded contracts during 2008 to over 90 million contracts traded in 2012. Traders with commercial interests, such as a natural gas producer that sells natural gas, frequently use futures contracts to minimize exposure to price risk by locking in a price to pay, or receive, for natural gas delivered in the future. Also, non-commercial traders, such as individual futures traders, investment banks, hedge funds and pension funds, hold financial derivative commodity contracts, including natural gas futures, as part of a diversified investment portfolio or to speculate on natural gas commodity prices. The non-commercial market participants provide market liquidity and act as counterparties to commercial market players. This helps to ensure that market prices reflect all information about current and future supply and demand for natural gas physical and derivative products in the market.



47. Natural gas futures and options contracts are traded on the New York Mercantile Exchange (“NYMEX”), which is a regulated commodity futures exchange owned and operated by the CME Group, and the Intercontinental Exchange, which is commonly referred to as “ICE”.

48. In addition to the futures and options contracts traded on exchanges, natural gas derivative contracts are also traded in over-the-counter (“OTC”) markets. The OTC contracts include swaps and forward contracts, which trade through voice brokers, electronic platforms, and direct contract with counterparties.

**b) Trading of Natural Gas Futures Contracts on NYMEX**

49. NYMEX Natural Gas futures are traded via open outcry and electronically on CME Globex. They also are traded off-exchange for clearing only as an EFS, EFP or block trade through CME ClearPort. More specifically, CME ClearPort provides a comprehensive set of flexible clearing services for the global OTC market that clears transactions across from 1,800 listed contracts over multiple asset classes. Clearing more than 300,000 contracts daily, CME ClearPort also brings together more than 17,000 registered users around the world, including commercial, banking and hedge funds firms to FCMs and clearing firms.

50. A NYMEX natural gas futures contract requires the seller to deliver, or the buyer to take delivery of, natural gas at the contractually agreed-upon price in a specified future month. NYMEX Natural Gas futures contracts call for delivery of natural gas at Henry Hub, which is a central distribution location, or hub, on the natural gas pipeline system in southern Louisiana. Trading of any delivery month for NYMEX Natural Gas futures contracts ends three business days prior to the first day of the delivery month. In addition to being settled by delivery, NYMEX Natural Gas futures can be liquidated by means of a bona fide Exchange for Related Position (“EFRP”), which establishes a futures position for either the buyer or seller. Most NYMEX Natural Gas futures contracts are liquidated or cancelled by purchasing or selling a

covering futures position prior to the delivery date. Natural gas swap and option contracts also come due on a fixed “delivery” date in a future month, but they always settle financially.

51. Prices for NYMEX Natural Gas futures contracts are based on physical delivery of natural gas at the Henry Hub in Louisiana. The contract unit is 10,000 million British thermal units (“MMBTu”). Prices are quoted in U.S. dollars and cents per MMBTu. The symbol for NYMEX Natural Gas futures contracts (also referred to as Henry Hub Natural Gas futures contracts) is “NG”, and trading hours are Sunday through Friday from 6:00 p.m. to 5:00 p.m. Eastern Time (ET), with a 60-minute break each day beginning at 5:00 p.m. Listed contracts include the current year plus the next twelve calendar years.

52. The daily settlement price of NYMEX natural gas futures contracts is the weighted average price of contracts traded in the last two minutes of trading. Specifically, the first six contract months in NYMEX Natural Gas futures are settled by CME Group staff based on trading activity on CME Globex during the settlement period, which is between 14:28:00 and 14:30:00 (ET). The final settlement price, at expiration of the futures contract, is referred to as the NYMEX settlement date and is calculated by the weighted average price of contracts traded in the last half-hour of trading on the date that is three business days prior to the first calendar day of the delivery month.

53. Natural gas futures contracts are “marked to market” every day, using the latest spot price for similarly dated transactions. The difference between the original and most recent spot price is posted as cash by buyers or sellers, which means that the trading price of their futures positions are always marked in accordance with the latest spot price. Margin requirements are posted when the futures contract transaction is initiated, and if price movements are large, the posted margin requirements may increase. In a liquid and active market, a trader

can liquidate a position any time at the current market price. Therefore, natural gas spot prices directly impact trading and settlement prices and margin requirements for natural gas futures and options contracts.

54. Natural gas futures contracts traded on NYMEX include: Henry Hub Natural Gas Futures (NG); Natural Gas Options (European) (LN); Natural Gas Options (American) (ON); Henry Hub Natural Gas Penultimate Financial Futures (NP); Henry Hub Natural Gas Last Day Financial Futures (HP); Rockies Natural Gas (Platts IFERC); Basis Futures (NR); TETCO M-3 Natural Gas (Platts Gas Daily/Platts IFERC); Index Futures (IX); and E-mini Natural Gas Futures.

55. NYMEX also lists options on futures contracts. A purchaser of a natural gas call option has the right, but is not obligated to purchase a futures contract for a specified future month at a predetermined strike price. The strike price of a particular contract can vary by month, and if bidweek prices are higher, then the buyer of the option will exercise his rights. European options are exercised only on a specific day, which is the maturity date, but American options can be exercised any time up to the maturity date. Most natural gas option contracts are European options.

#### **c) Trading of Natural Gas Futures Contracts on ICE**

56. ICE offers a global trading exchange for its natural gas futures contracts, with listing of the world's most heavily traded natural gas futures contracts and connectivity through the electronic trading platform known as "WebICE". ICE has approximately forty percent of the open interest in Henry Hub contracts. ICE also offers Henry Hub swing futures, cash settled basis futures, cash settled swing futures and NG options.

57. In addition, ICE offers 1, 3 and 6-month calendar spread options, same day options, Cal 1x options and options on the swing swap. A "calendar spread" is a pair of

contracts, one for the purchase of natural gas deliverable in one month and one for the sale of the same quantity of natural gas deliverable in a subsequent month, such as the February/March 2008 spread.

58. The Henry LD1 futures contract trades in both a “flow-contract” and in what are known as “ICE Lots”. A flow-contract is 2,500 MMBtus for each day of the month, and an ICE Lot consists of 2,500 MMBtus. The ICE Lots contract is listed as “NG LD1 Futures Ice Lots.” On WebICE, the flow-contract is listed as “NG LD1 Futures”. The EIA futures contract offered on ICE also provides a means to hedge positions against movements reflected in the U.S. Energy Information Administration (EIA) published weekly natural gas financial weekly gas storage inventory number.

59. Futures contracts on ICE known as “Strips” are linked to the seasons in natural gas – broken down by the traditional storage injection and withdrawal periods of April through October, and November through March. ICE also allows trades in custom Strips to allow trading of different months together. The Strips trade in addition to full calendar years and quarters. Trading calendar spreads is a common strategy in natural gas, as fundamentals of the physical market drive different amounts of increased and decreased pricing in the market.

60. ICE also lists futures contracts known, for example, as the SOCAL Fixed Price Future, EP Permian Basis Future, EP San Juan Swing Future, Waha Index Future, and EP San Juan Basis Future, which respectively are linked to the specified spot price per MMBtu of natural gas on the delivery date published in “Inside FERC”, Gas Daily or NGI’s Bidweek Survey for Southern California Border Avg., Permian, Waha Hub in West Texas, and El Paso (San Juan Basin).

61. European style natural gas option contracts trade both on WebICE and through

brokers that clear on ICE. Natural gas options contracts on ICE that are attractive to exercise because of price are referred to as “in the money”. In the money options on ICE exercise automatically by converting to an underlying future with a contract price equal to the strike. Out of the money options expire automatically.

**d) Trading of Natural Gas Financial Swap Contracts**

62. A fixed for floating natural gas swap is a bilateral transaction in which two parties agree to exchange different cash flow streams, for example, a fixed price swap in which the buyer agrees to pay the seller a fixed price (*e.g.*, \$3.00/MMBtu) and the seller agrees to pay the buyer an index price (*e.g.*, the SoCal bid-week index price for all of the months in 2011). If the Southern California bid-week index price in April settles at \$4.00, then the seller will pay \$1.00/MMBtu to the counterparty in that month.

63. A basis swap is a bilateral transaction between a buyer and seller in which the buyer agrees to pay the seller the NYMEX final settlement price, plus or minus a differential (*e.g.*, -\$0.20/MMBtu), and the seller pay the buyer the monthly index price at a fixed location (*e.g.*, at SoCal). Basis swaps can be used to hedge price differences between locations because the fixed amount is paid in lieu of the spot price for transportation to the delivery location. For example, if the seller agrees to receive NYMEX settlement price -\$0.20, and NYMEX settles at \$6.00/MMBtu and the specified index settles at \$5.60 (providing a -\$0.40 basis), the seller will have a \$0.20/MMBtu gain.

64. A financial index swap is a bilateral transaction between a buyer and seller in which the buyer agrees to pay the seller the monthly index settlement price, plus or minus a premium or discount in exchange for the daily index price.

65. Certain swaps transactions are subject to clearing, margin, position and reporting requirements under the Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd

Frank”). ICE offers trading on an electronic platform in a wide variety of basis swaps and index swaps, including, for example, the Fixed Price Swap – El Paso – San Juan Basin, Blanco Pool (NG Fin FF, FP for IF); and the Index Swap – El Paso – San Juan Basin, Blanco Pool (NG Fin Index Swap, IF for GDD).

**B. Regulatory Investigations into Defendants’ Manipulation of the Natural Gas Market**

66. In recent months, both FERC and the CFTC have announced investigations into Total’s manipulation of natural gas prices in the southwestern region of the United States. The investigations involve allegations predicated upon conduct involving overlapping actors and periods of time.

67. **FERC’s Preliminary Determination:**<sup>4</sup> On September 21, 2015, FERC’s Office of Enforcement announced that it has preliminarily determined that TGPNA and TGPNA’s West Desk traders and supervisors Tran and Hall violated Section 4A of the Natural Gas Act and FERC’s Anti-Manipulation Rule, 18 C.F.R. § 1c.1 (2015), by devising and executing a scheme to manipulate the price of natural gas in the southwest between June 2009 and June 2012. More specifically, FERC uncovered evidence of a scheme to make largely uneconomic, money-losing trades for physical natural gas during bid-week designed to move indexed market prices in a way that benefited the company’s related positions. TGPNA’s West Desk implemented this bid-week scheme on at least 38 occasions during this period. Further, FERC asserted that Tran and Hall each implemented the scheme and supervised and directed other traders in implementing the scheme.

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<sup>4</sup> See “Staff Notice of Alleged Violations re Total Gas & Power, North America, Inc. (TGPNA)”, FERC, Sept. 21, 2015, *available at*: <https://www.ferc.gov/enforcement/alleged-violation/notices/2015/TGPNA-NAV.pdf>.

68. **CFTC's Order:**<sup>5</sup> On December 7, 2015, the CFTC announced that it had reached a \$3.6 million settlement with TGPNA and Tran for attempted manipulation of natural gas monthly index settlement prices. The CFTC provided examples of manipulation involving four major trading hubs in Texas, New Mexico, and California (*i.e.*, the Permian, San Juan, SoCal, and Waha hubs) during monthly bid-week settlement periods for September 2011, October 2011, March 2012 and April 2012. Other aspects of the Order indicate that the misconduct was far more widespread than the four examples identified therein. The Order also found that TGPNA and Tran intentionally employed a manipulative device in connection with their purchasing and/or selling large volumes of fixed-price natural gas during bid-week. More specifically, the CFTC determined that TGPNA and Tran employed a manipulative device by purchasing and/or selling large volumes of fixed-price natural gas at the relevant hubs (which were specifically chosen to amplify TGPNA's effect on index prices) before and during bid-week that were intended to benefit TGPNA's related financial positions. A more detailed description of Total's trading operations and the mechanics of its unlawful manipulative scheme is set forth below.

### **C. TGPNA's Manipulation of the Natural Gas Markets**

#### **1. TGPNA's Physical Trading**

69. During the Class Period, TGPNA's West Desk traded both financial and physical natural gas products, primarily on ICE and through direct negotiations with other market participants in the over-the-counter bilateral market. TGPNA, however, had no material

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<sup>5</sup> See "Press Release: CFTC Files and Settles Charges against Total Gas & Power North America, Inc. and Therese Tran for Attempted Manipulation of Natural Gas Monthly Index Settlement Prices", CFTC, Dec. 7, 2015, *available at*: <http://www.cftc.gov/PressRoom/PressReleases/pr7289-15>; *see also* "Order Instituting Proceedings Pursuant to Sections 6(c) and 6(d) of the Commodity Exchange Act, Making Findings and Imposing Remedial Sanctions", *In the Matter of Total Gas & Power North America, Inc., and Therese Tran*, CFTC Dkt No. 16 -03 (C.F.T.C. Dec. 7, 2015), *available at*: <http://www.cftc.gov/idc/groups/public/@lrenforcementactions/documents/legalpleading/enfnorhamerorder12715.pdf>.

customer business, physical assets, or transportation at the relevant hubs during the Class Period.

70. TGPNA's West Desk priced its monthly physical transactions using one of two methods, "fixed-price" or "index." Both pricing methods call for the delivery of natural gas for the prompt month at a specified delivery location. Fixed-price transactions are negotiated by the buyer and seller and priced at the time of the transaction. The prices for index transactions, on the other hand, are determined each month by trade publications, such as Platts' *Inside FERC Gas Market Report* and NGI's *Bidweek Survey*.

71. During the Class Period, bid-week was an important component of TGPNA's trading strategy, and TGPNA was an active participant, both as a seller and purchaser, in the southwestern and Texas regions' natural gas markets. TGPNA's West Desk reported its physical fixed-price bid-week transactions to Platts and NGI. Natural gas market participants, including producers and end-users, use monthly index prices to market their gas and to determine their risk exposure.

## **2. TGPNA's Financial Trading**

72. During the Class Period, TGPNA's West Desk primarily traded financial basis swaps and financial index swaps. For financial basis swaps, the buyer pays the seller the NYMEX final settlement price plus or minus a differential, and the seller pays the buyer the monthly index price at a particular location. For financial index swaps, the buyer pays the monthly index settlement price plus or minus a premium or discount in exchange for the daily index price. For the purpose of TGPNA's scheme, financial basis and index swaps were the financial positions that its contrived excessive and manipulative physical trading were intended to benefit.



### **3. TGPNA's Print Risk**

73. During the Class Period, TGPNA monitored its overall risk by assessing its combined physical and financial positions in each region. TGPNA grouped its monthly risk or exposure into three risk categories: (1) Basis Risk, also called “paper” risk, which represents the locational risk of a position, relative to the settlement price of the NYMEX futures contract; (2) Index Risk, which reflects the pricing risk associated with trading fixed price relative to physical index at a particular location; and (3) NYMEX Risk, which represents the risk derived from exposure to the NYMEX futures price.

74. From this information, Defendants were able to and did track TGPNA's “print risk” or exposure to the monthly index settlement prices published by Platts and NGI. TGPNA measured its print risk by subtracting its net index position from its net financial position. TGPNA stood to benefit from this exposure depending on the outcome of the monthly index settlement price at a particular hub location and the outcome of NYMEX NG settlement prices. During the Class Period, TGPNA reported its bid-week trades, so these trades contributed to the monthly index settlement prices published by Platts and NGI.

75. During the Class Period, the West Desk maintained and updated a sophisticated spreadsheet (“bid-week spreadsheet”) to track its physical and financial positions the day before and during bid-week. Through the bid-week spreadsheets, the West Desk was able to track periodically throughout the day the total market volume known to the West Desk versus the estimated total volume for bid-week, and was able to track the West Desk's print risk, including exposure to NYMEX NG futures prices.

### **4. TGPNA's Bid-Week Trading**

76. During the Class Period, TGPNA traded fixed-price natural gas in a manner

designed to benefit its related financial positions. Specifically, the West Desk acquired large print risk exposure prior to the start of bid-week. Depending on the direction of its intended print risk exposure (*i.e.*, long or short), TGPNA executed enough fixed-price trades during bid-week with the intent to affect favorably (to TGPNA) monthly index settlement prices at the relevant hubs. Transaction data that the CFTC obtained from ICE and TGPNA reflected that TGPNA's West Desk's fixed price trades accounted for well over half of the total market by volume during the relevant bid-week even though TGPNA had no material customer business, physical assets, or transportation at the relevant hubs during this period. In addition, TGPNA's own transaction data shows a strong correlation between increased print risk and increased fixed-price market share during bid-week.

**a) TGPNA's Management's Response to Bid-Week Activity**

77. TGPNA's management was aware of TGPNA's high market share during bid-week and its intended impact on monthly index settlement prices and TGPNA's profit and loss. For example, prior to and throughout the Class Period, TGPNA's Risk Control group issued daily and monthly reports entitled, "Inside FERC/NGI Review" and "TGPNA Share in Index Settlement" (hereinafter, "market share reports"). These market share reports highlighted TGPNA's high market share at various hub locations throughout the United States. TGPNA's market share reports were routinely emailed to management and traders, including Tran, after each bid-week.

78. TGPNA's market share reports also included a comment on "Platts methodology," that reveals its understanding of how the trade publications calculate bid-week volume:

If a reported deal is included in the published report, there is no discount or premium on level of volumes or deals published. If we report 10 on an index

and our counterparty reports 10, the volume published is 20 and the deal count is two.

If we report 10 and our counterparty reports nothing, the volume published is 10 and the deal count is one.

79. Accordingly, it was TGPNA's understanding that the trade publications factored in the reported volumes of both counterparties to a transaction in estimating total fixed-price volume traded during bid-week. Assuming all counterparties report, the highest percentage that any one market participant could achieve is 50% of a market. It follows that a market participant that has 50% of the volume in a market where all counterparties report would be a party to 100% of the transactions reported to Platts.

80. In a February 2007 email, a TGPNA manager noted the compliance benefit of the market share reports:

This report constitutes a reliable monitoring of trading activity during bid week. In light of the recent development of the CFTC and their increased scrutiny, we need to be more accountable of our activity in places where TGPNA holds a substantial [*sic*] share of the overall volume traded at one single point.

Therefore, I suggest that the middle/back office enquires [*sic*] about the specific reason which have [*sic*] prompted TGPNA to trade more than 40% of the overall volumes traded at one single point. This should be a written exercise where the concerned trader will be able to explain his/her motivation.

81. TGPNA's management, however, never questioned or disciplined traders, including Tran, for having high market share at any particular hub location. From February 2009 through February 2011, TGPNA's compliance officer performed an in-depth analysis of TGPNA's monthly price reporting and its impact on published index prices as well as its impact on TGPNA's profit and loss. In February 2009, TGPNA's compliance officer issued the first report to management recommending:

TGPNA Management may wish to contemplate ramping down its fixed price and physical basis trading in the markets in which it has a large share. Consider compliance both in terms of fact and appearance.

82. Again, TGPNA's management never questioned or disciplined any traders, including Tran, in connection with their excessive market share in the physical price setting market during bid-week.

**b) September 2011 Bid-Week Trading**

83. Prior to bid-week for September 2011, TGPNA knowingly and/or recklessly employed a scheme intended to manipulate the monthly index settlement prices at SoCal and Permian to benefit a related financial spread position established by the West Desk at the same hub locations. As of August 25, 2011, the first day of bid-week, the West Desk had acquired a print risk position of 259,981 MMBtus/day (long) at SoCal and 460,563 MMBtus/day (short) at Permian.

84. TGPNA's market share report showed that the West Desk's fixed price trading during bid-week accounted for approximately 42% of the total reported NGI market volume at SoCal and 45% of the total reported Platts market volume at Permian.<sup>6</sup> The West Desk's bid-week trading was ultimately intended to artificially move markets prices in order to benefit TGPNA's financial spread position by increasing the spread between the monthly index settlement price at SoCal and Permian.

**c) October 2011 Bid-Week Trading**

85. Prior to bid-week for October 2011, TGPNA knowingly and/or recklessly

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<sup>6</sup> TGPNA calculates this market share percentage by dividing its daily volume traded during bid-week by the total volume published by Platts and NGI. For this bid-week, TGPNA arrived at the 42% by dividing its daily volume by the total volume reported by NGI (*i.e.*, 305,000 MMBtus/day + 719,000 MMBtus/day). Assuming all counterparties report, if TGPNA is on half of every single reported fixed-price trade, then it would be 50% of the index; thus, no market participant's transactions could constitute more than 50% of the index.

employed a scheme intended to manipulate the monthly index settlement price at San Juan to benefit a short financial position established by the West Desk prior to bid-week. According to TGPNA's risk report, as of September 26, 2011 – the first day of bid-week – the West Desk had acquired a print risk position of approximately 304,952 MMBtus/day (short) at San Juan. TGPNA's market share report showed that to benefit this position the West Desk executed approximately 41% of the total reported market volume of fixed-price transactions. The West Desk's bid-week trading was ultimately intended to benefit TGPNA's short financial position held at San Juan by narrowing the spread between the NYMEX settlement price and the monthly index price at San Juan.

**d) March 2012 Bid-Week Trading**

86. Prior to the March 2012 bid-week, TGPNA knowingly and/or recklessly employed a scheme intending to manipulate the monthly index settlement price at SoCal to benefit a short financial position established by the West Desk prior to bid-week. According to TGPNA's risk report, as of February 23, 2012 – the first day of bid-week – the West Desk had acquired a print risk position of approximately 100,028 MMBtus/day (short) at SoCal. During bid-week, Tran encouraged another West Desk trader to execute fixed-price trades in a manner that was intended to benefit TGPNA's related short financial position established by the West Desk prior to bid-week. As part of this scheme, Tran also executed some fixed price trades during bid-week.

87. Tran's and the West Desk trader's fixed-price trades combined for approximately 53% of the total ICE market volume traded at SoCal during bid-week.<sup>7</sup>

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<sup>7</sup> TGPNA's records did not have a total volume figure for SoCal Needles location so this market share figure instead reflects the total volume traded on ICE during this month (*i.e.*, total volume of all of Total's trades divided by the total volume traded on ICE). ICE data does not reflect bilateral transactions not executed on ICE. TGPNA's transaction data shows that the majority of its fixed-price transactions (144,516 MMBtus/day of 145,516 MMBtus)

TGPNA's bid-week trading was ultimately intended to benefit TGPNA's short financial position held at SoCal by narrowing the spread between the NYMEX settlement price and the monthly index price at SoCal.

88. According to the CFTC Order, the West Desk trader stated that when Tran initially asked him to participate in bid-week, he understood that he was to "flatten" TGPNA's physical position by trading fixed-price natural gas during bid-week. The trader also stated that, during the March 2012 bid-week, Tran began to "encourage" him to do more than simply "flatten" the physical position but also to trade more by buying and selling fixed-price natural gas. This "buying and selling" of fixed-price in volume during bid-week was intended to and in fact affected the monthly index price.

**e) April 2012 Bid-Week Trading**

89. Prior to the start of bid-week for April 2012, TGPNA knowingly and/or recklessly employed a scheme intended to manipulate the monthly index settlement prices at SoCal and San Juan to benefit a related financial spread position established by the West Desk at the same hub locations. According to TGPNA's risk report, as of March 26, 2012 – the first day of bid-week - the West Desk had acquired a print risk position of 306,658 MMBtus/day (long) at SoCal and 306,097 MMBtus/day (short) at San Juan.

90. TGPNA's market share report showed that the West Desk's fixed price trading accounted for approximately 18% of the total reported market volume at SoCal during bid-week. In addition, the West Desk trader, supervised by Tran, executed fixed price transactions that accounted for approximately 29% of the total reported market

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occurred at Needles, one of several sub-locations at SoCal. The West Desk trader described the Needles location as the "discounted" SoCal sub-location, and noted that TGPNA focused its trading at this discounted sub-location to amplify TGPNA's effect on the index.

volume at San Juan during bid-week. TGPNA's bid-week trading was ultimately intended to benefit TGPNA's financial spread position by increasing the spread between the monthly index settlement price at SoCal and San Juan.

91. According to the CFTC Order, the West Desk trader acknowledged that for the April 2012 bid-week, he was responsible for preparing the West Desk's bid-week spreadsheet and therefore was aware of the desk's positions going into bid-week and, as a result, TGPNA's impact on the monthly index.

#### **5. TGPNA Acted with the Requisite Intent**

92. Based on the foregoing, it is clear that TGPNA and Tran knowingly and recklessly manipulated the price of physical natural gas in order to impact the prices of natural gas futures and related derivative contracts. At minimum, TGPNA acted recklessly or with reckless disregard for the potential impact of their trading on natural gas prices and the integrity of the natural gas market. TGPNA's traders knew that their large volumes fixed-price trading during bid-week was intended to and did affect the monthly index prices and they carried out their bid-week trading and reported these trades to trade publications at contrived prices in order to influence their concurrently held financial positions. This manipulation was directed at the relevant hubs, but also at the Henry Hub. In fact, Tran monitored in real time the relationship between her bid-week trading activities and related financial positions through TGPNA's bid-week spreadsheets. TGPNA's trade data shows that Tran acted on her understanding that bid-week trading activities affect financial positions, structuring her trades in a manner that was intended to take advantage of the relationship.

93. Moreover, as early as 2007, TGPNA's management issued monthly market share

reports highlighting locations where TGPNA had high market share in the fixed price market. TGPNA's compliance officer also conducted monthly reviews, from 2009 through early 2011, of TGPNA's reporting impact on the monthly index price and TGPNA's P&L. According to the CFTC Order, TGPNA's compliance officer also warned TGPNA management that it should "contemplate ramping down its fixed price . . . in the markets in which it has a large share." Despite these warnings and the understanding that TGPNA reporting impacted the monthly index, TGPNA's West trading desk continued its manipulative trading.

94. Therefore, TGPNA and Tran were aware and intended to impact the prices of the monthly index at the relevant hub locations during the Class Period, given the monthly share reports, compliance officer warnings, and the fact that TGPNA had no material customers, assets, or transportation in these regions to otherwise justify the bid-week trading. In spite of these facts, on at least 38 occasions during the Class Period, TGPNA manipulated the price of physical natural gas positions in order to benefit its positions in financial natural gas instruments.

**D. Expert Analysis Confirms that Defendants' Manipulation of Natural Gas Prices in the Relevant Hubs Affected Prices of Natural Gas Futures and Related Derivatives**

95. Statistical studies by Plaintiffs' Consulting Expert demonstrate that the manipulation examples disclosed by the regulatory investigations is linked to a broader pattern of manipulative conduct. In particular, the analysis establishes three facts: *First*, TGPNA succeeded in manipulating San Juan, Permian and SoCal prices during September 2011, October 2011, March 2012 and April 2012 as outlined in CFTC Order. *Second*, TGPNA also contemporaneously manipulated the NYMEX settlement price either by artificially influencing the Henry Hub spot prices or NYMEX NG prices. *Third*, evidence of TGPNA's pattern of manipulation of natural gas prices extends beyond the four-month period covered by the CFTC's settlement.



96. The Consulting Expert used precise natural gas futures prices (NG) to establish these facts. The NG transactions prices are time stamped to the nearest minute, between January 1, 2002 and June 30, 2011, and subsequently, time stamped to the nearest milliseconds as of June 30, 2011, 6 p.m. The Consulting Expert analyzed 36,613,981 transactions conducted on the CME, covering both pit and electronic trading, during the Class Period of June 1, 2009 to June 30, 2012. The time-stamped transaction price data are averaged for each hour during the day. The daily price is taken at the average NG transaction price during 1 p.m. for each day. Spot price data for each of the four hubs mentioned above, Henry Hub, San Juan, SoCal and Permian are obtained from NGI.

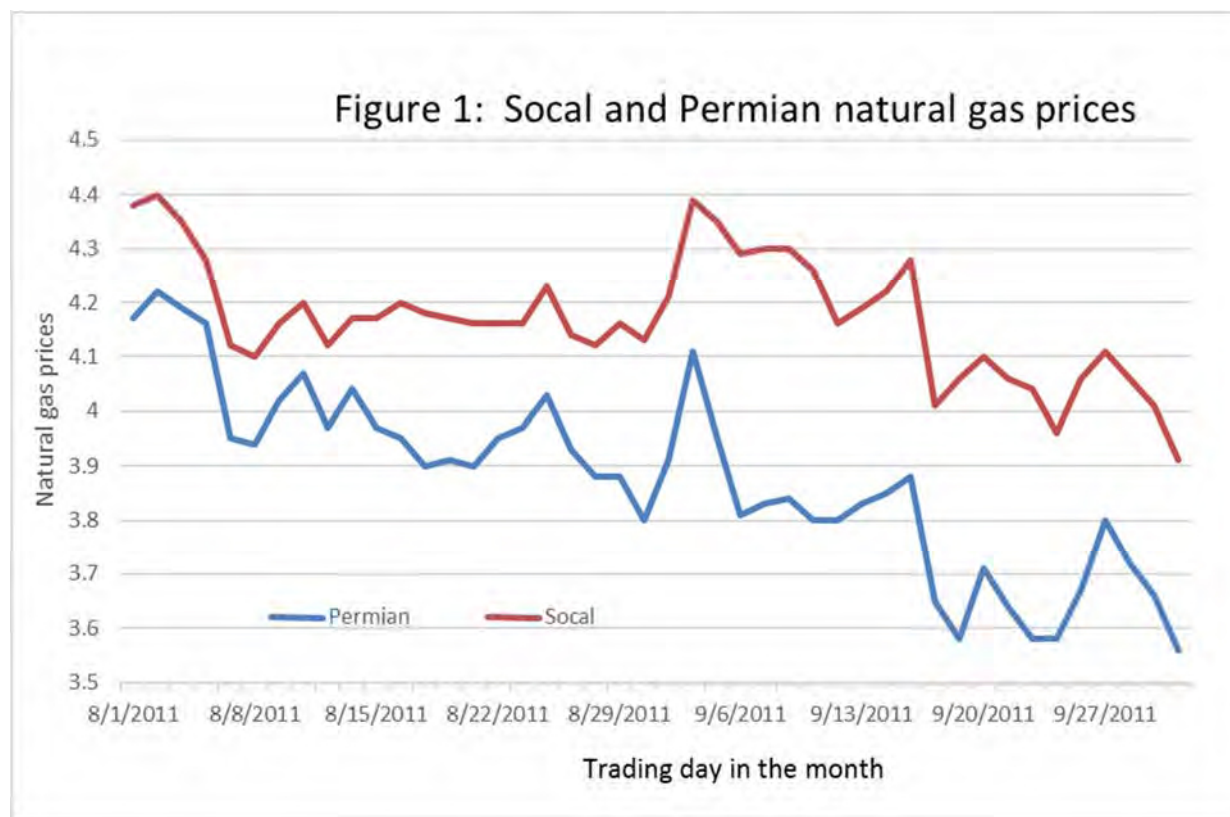
97. According to the CFTC Order and as discussed above, TGPNA attempted to manipulated natural gas prices by establishing large positions at index prices (to be settled or executed at the bid-week prices) and then artificially moving the natural gas prices during the bid-week (last five trading days of each calendar month) using its large volume of fixed-price transactions. This manipulative activity allowed TGPNA to sell large quantities of natural gas at, and receive payments or cash settlements based upon, these artificial bid-week prices. To benefit its short financial index swap position, at the start of each new delivery month, the daily natural gas prices at these hubs were then pushed back down. The cycle then repeated in subsequent calendar months. Alternatively, TGPNA established a long position in one hub and short position at another hub and engaged in fixed price contracts to benefit its financial position.

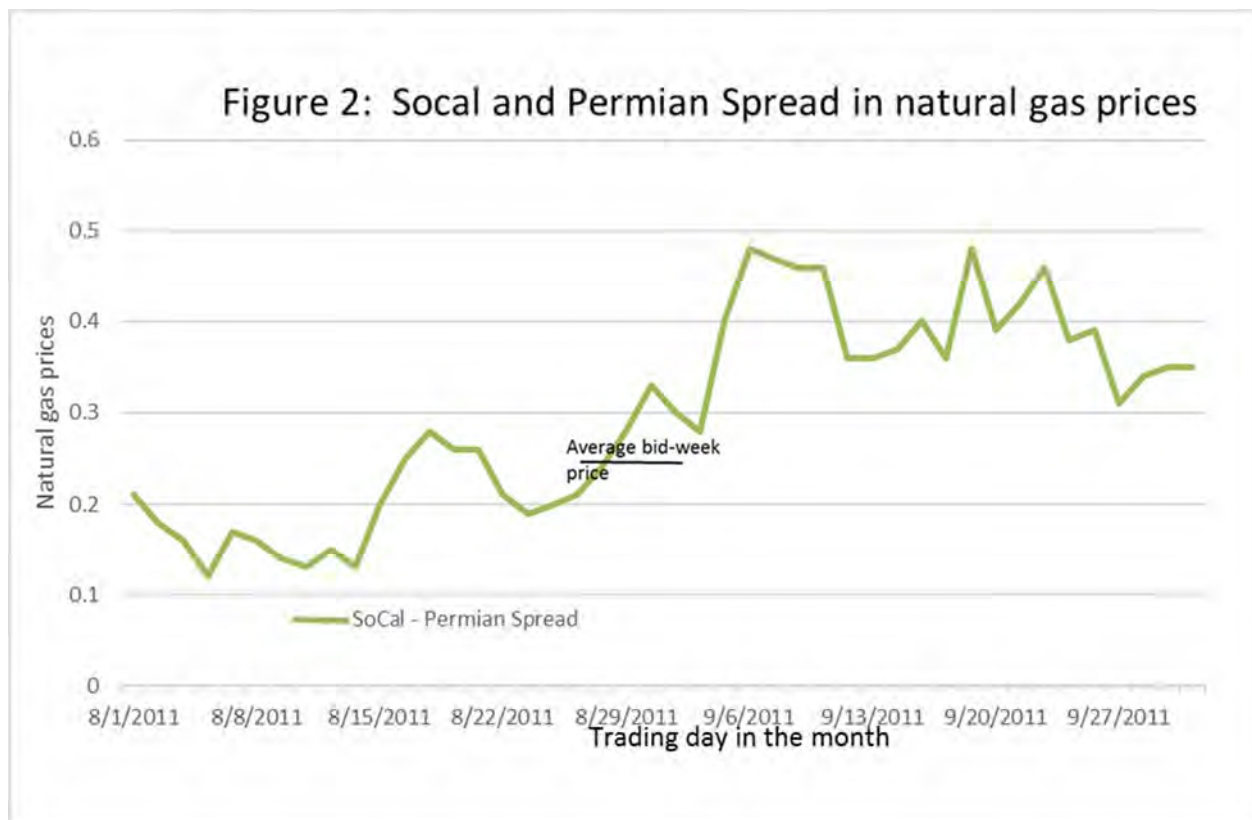
#### **1. Consulting Expert's Analysis of September 2011 Bid-Week**

98. With respect to the September 2011 bid week, according to the CFTC Order, TGPNA established a long print risk position of 259,981 MMBtus/day at Socal and a short print risk position of 460,563 MMBtus/day at Permian as of August 25, 2011, which was the first day

of bid-week for September 2011. TGPNA then conducted fixed-price transactions during bid week to widen the spread by making Permian prices lower prices relative to SoCal prices (or SoCal prices higher relative to Permian prices), which would benefit TGPNA's synthetic paper spread position.

99. Figures 1 and 2 show the pattern of prices and the spread between SoCal and Permian during August-September 2011. As can be seen from these figures, the natural gas prices during September bid-week moved in favor of TGPNA's print risk position, thus benefiting TGPNA.

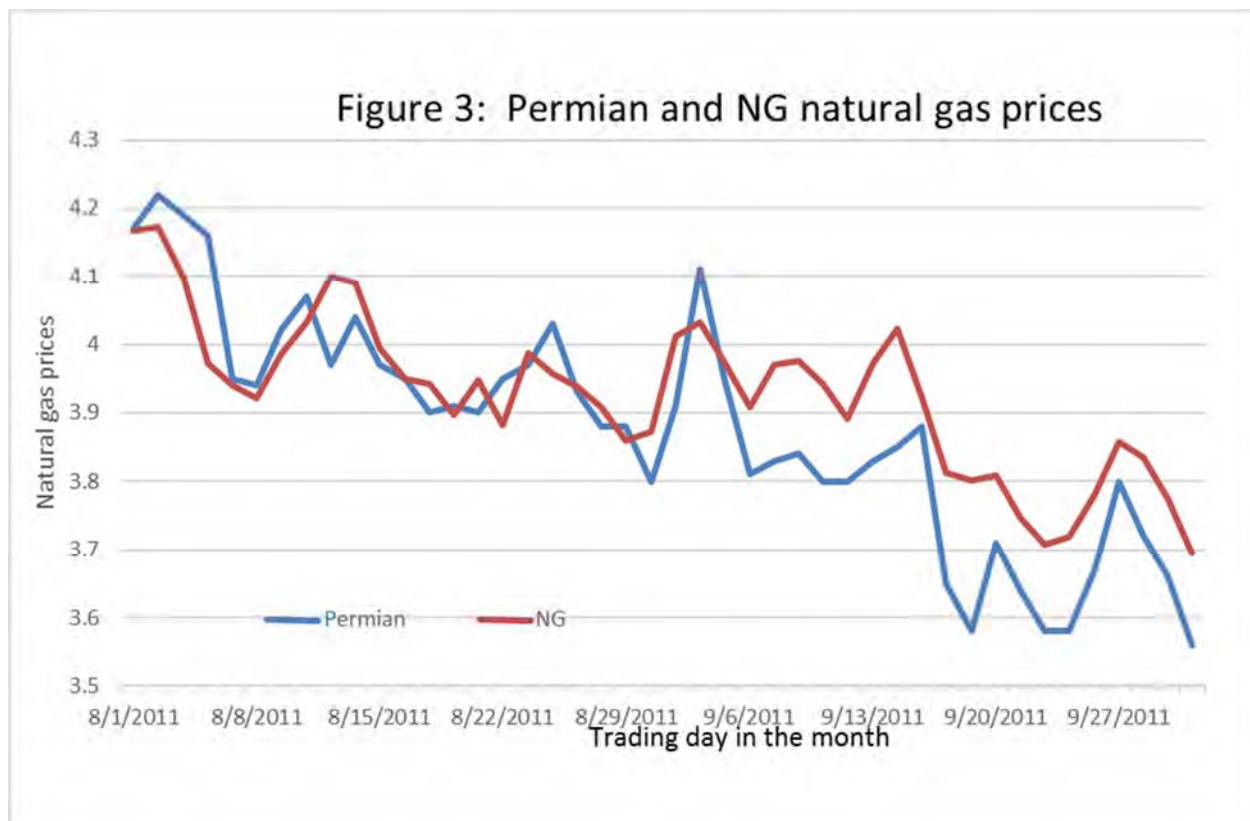




100. During the last five trading days in August 2011, the Permian price went down by \$0.02 while the SoCal price went up by \$0.07, thus increasing the spread between the two by \$0.09, which is the direction that TGPNA intended to influence prices to benefit its short print risk position. Alternatively, the SoCal-Permian spread averaged \$0.22 during August 18-24, which increased to \$0.27 during August 25-31. This price movement is consistent with increasing the spread between SoCal and Permian, through uneconomic physical transactions, as stated in the CFTC Order and thus represents a successful manipulation of natural gas prices and related derivative contract prices during September bid-week by TGPNA.

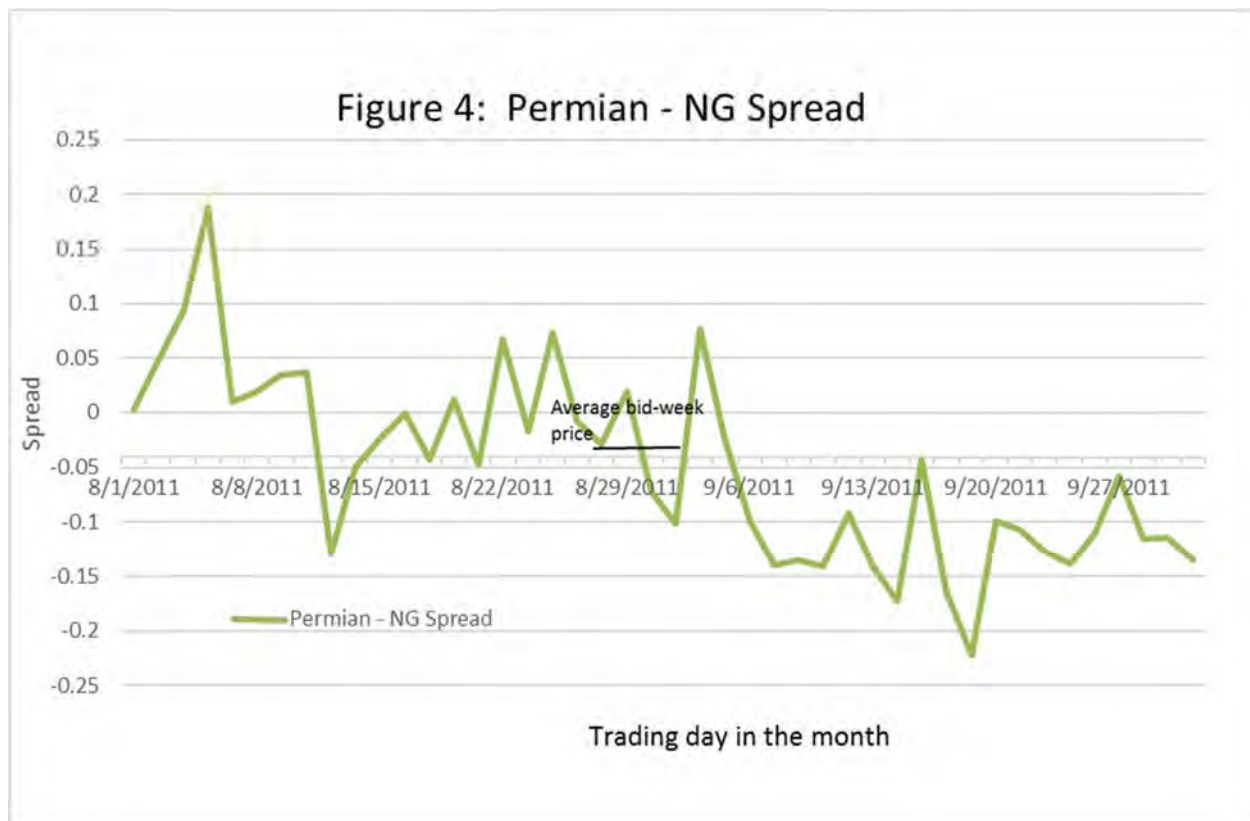
101. Given the uneven positions between SoCal and Permian, TGPNA also had a net long exposure to NYMEX prices through the Basis Risk of approximately 200,000 MMBtus/day. Consequently, manipulation of these two hub prices (SoCal and Permian) is also expected to

result in manipulation of NYMEX NG prices. Figure 3 shows Permian and NG prices around August and September 2011. Figure 3 shows that Permian prices declined relative to NG prices during September 2011 bid-week and even into September 2011 delivery month.

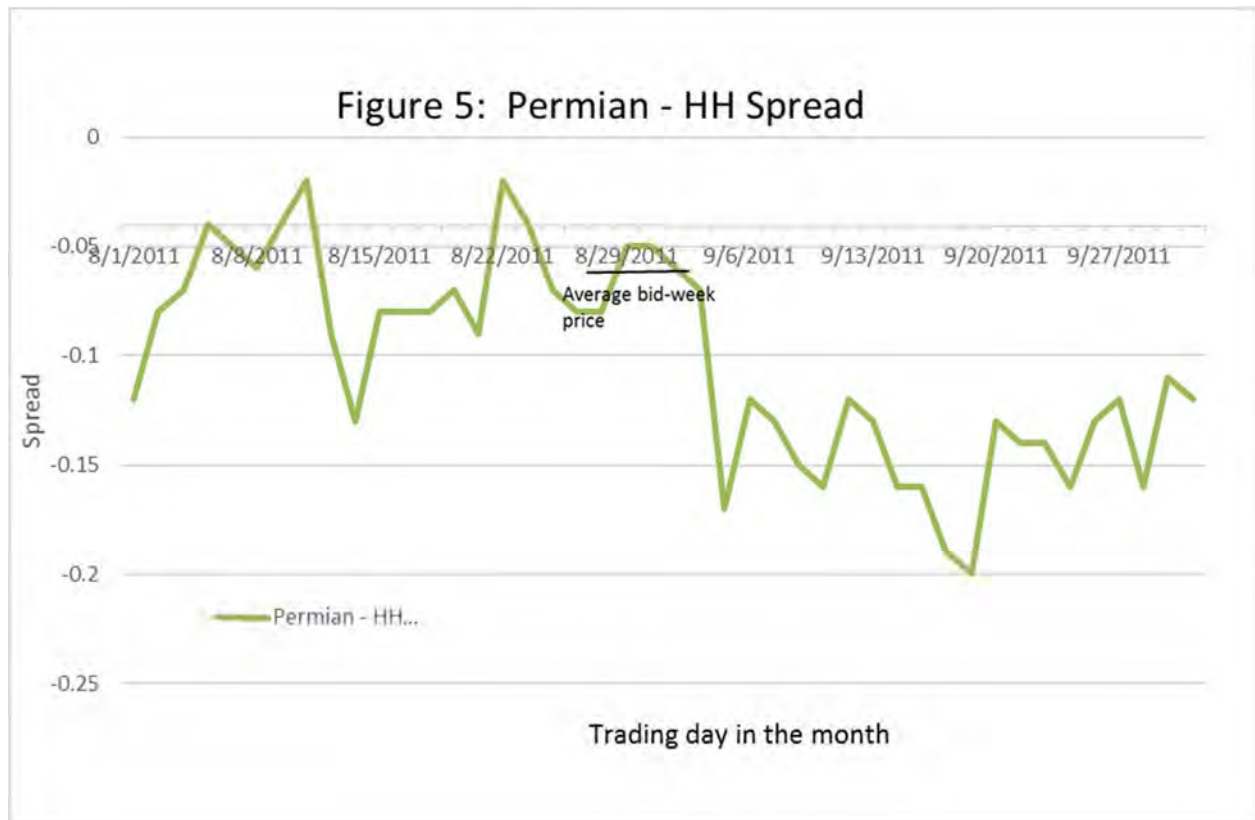


102. To demonstrate the bid-week price movements more clearly, the spreads between Permian and NG prices are shown in Figure 4. If TGPNA achieved these net positions by using two separate basis swaps, then it would create a net negative exposure of about 200,000 MMBtus/day for Permian prices relative to NYMEX prices at the beginning of September 2011 bid-week. Consistent with this manipulative position, during the week preceding the September 2011 bid-week (August 18-24), the spread between Permian and NG equaled \$0.02. For September 2011 bid-week, this spread fell to -\$0.04. This evidence is again consistent with the TGPNA's manipulation between SoCal and Permian hubs and the related exposure to NYMEX

NG prices. The evidence in Figures 3 and 4 further corroborate the price effects of TGPNA's manipulative trades both at the hubs as well as at NYMEX.



103. An alternative approach that TGPNA could have taken to establish some of the short position at Permian is to go short index swaps at Permian and long index swaps at Henry Hub. To investigate this avenue, Figure 5 plots the spread between Permian and Henry Hub. Once again, consistent with TGPNA's manipulative positions at Permian, September 2011 bid-week prices averaged \$0.04. This spread then generally declined during September 2011 delivery month. For the entire month of September 2011, this spread averaged -\$0.11 after falling as low as -\$0.20 around the middle of September 2011. Thus, these price movements are consistent with a successful manipulation by TGPNA of the hub prices at SoCal, Permian, Henry Hub as well as NYMEX NG prices.

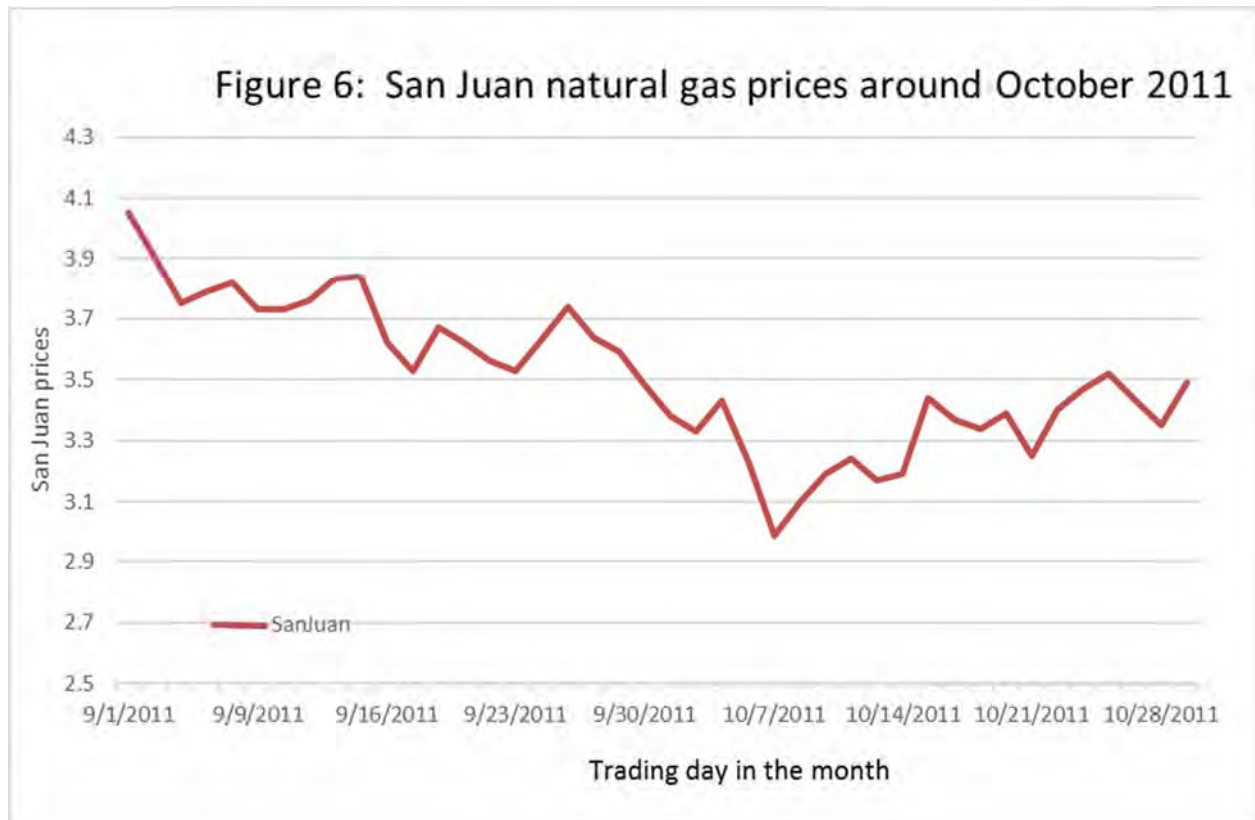


## 2. Consulting Expert's Analysis of October 2011 Bid-Week

104. With respect to the October 2011 bid-week trading, according to the CFTC Order, TGPNA also established a short print risk position of 304,952 MMBtus/day at San Juan as of September 26, 2011, which is the first day of bid-week for October 2011. TGPNA then conducted fixed-price transactions during bid week to benefit this short position.

105. Figure 6 shows the pattern of prices discussed in the CFTC Order around October bid week (September 26-30, 2011). During September 2011, the San Juan prices averaged \$3.71. During October bid-week, San Juan prices averaged \$3.62. During October 2011, San Juan prices fell to \$3.32, a decline of \$0.30 from the bid-week price. This decline in San Juan prices is consistent with a successful and profitable manipulation of San Juan hub prices to benefit TGPNA's established short print position at San Juan.





106. According to the CFTC Order, TGPNA traded financial index swaps and financial basis swaps. If TGPNA used a financial index swap contract to establish the October 2011 bid-week short position, then the subsequent decline in daily San Juan prices would be highly profitable for TGPNA. If TGPNA established the October 2011 bid-week short print position using financial basis swaps, then a subsequent decline in San Juan prices vis-à-vis NYMEX futures prices also would be highly profitable for TGPNA. These issues are examined next.

107. The CFTC Order states that “The West Desk’s bid-week trading was ultimately intended to benefit TGPNA’s short financial position held at **San Juan** by **narrowing the spread between the NYMEX settlement price and the monthly index price at San Juan.**”<sup>8</sup> This language indicates that at least some of the short position at San Juan involved financial

<sup>8</sup> See CFTC Order at 6 (emphasis added).

basis swaps with an exposure to NYMEX prices. Equally important, and as explained in more detail below, the scheme required TGPNA to ensure that NYMEX prices did not decline as much as San Juan prices.

108. Generally, “to narrow the spread” means that if the swap spread is positive, then make it a smaller number or even a negative number.<sup>9</sup> Thus, if a trader bets against the spread using financial basis swap contracts, the trader wants the measure of the difference (*i.e.*, the spread) between two prices to decline (*i.e.*, to narrow). During the Class Period, TGPNA not only bet against the spread, but also engaged in uneconomic trades to create artificial natural gas prices to narrow the difference between the San Juan monthly index price and the NYMEX settlement price. To ensure a profit on its short financial position, driving the price at San Juan down would not be sufficient. This is because even if San Juan prices declined, but NYMEX NG prices declined even more, TGPNA would lose money on its San Juan short basis swap position. Hence, in addition to driving the San Juan prices down, TGPNA had to ensure that NYMEX NG prices did not decline as much. Consequently, to increase its chances for a profitable trade, TGPNA also had to influence either Henry Hub prices or NYMEX NG prices directly. Conveniently for TGPNA, both the San Juan monthly index and NYMEX NG final settlement prices for the near-month contract were established during the last week of each

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<sup>9</sup> For instance, the ICE ANR SE Basis Futures contract description states: “A monthly cash settled Exchange Futures Contract based upon the mathematical result of subtracting the price of the NYMEX Henry Hub Natural Gas Futures Contract, as defined in Reference Price B, from the monthly price published by Inside FERC for the location specified in Reference Price A.” See <https://www.theice.com/products/6590127/ANR-SE-Louisiana-Basis-Future>. Similarly, the ICE Basis Swap Texas Eastern Transmission Corp. East Texas Zone contract description states: “A monthly cash settled swap based upon the mathematical result of subtracting the price of the NYMEX Henry Hub Natural Gas Futures Contract, as defined in Reference Price B, from the monthly price published by Inside FERC for the location specified in Reference Price A.” See <https://www.theice.com/products/28687625/Basis-Swap-Texas-Eastern-Transmission-Corp-East-Texas-Zone>.

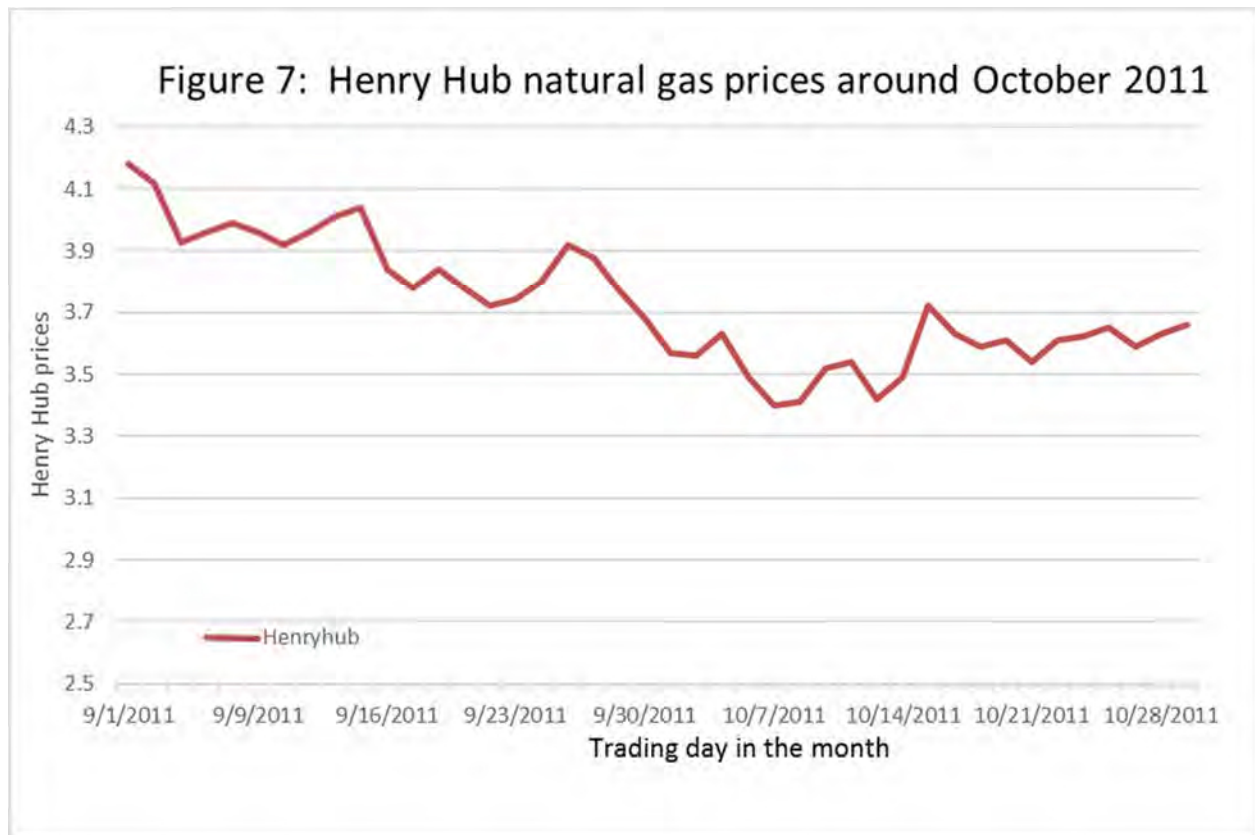


trading month – bid week for monthly index prices and the last two trading days of before the front month contract expires for NG futures.<sup>10</sup>

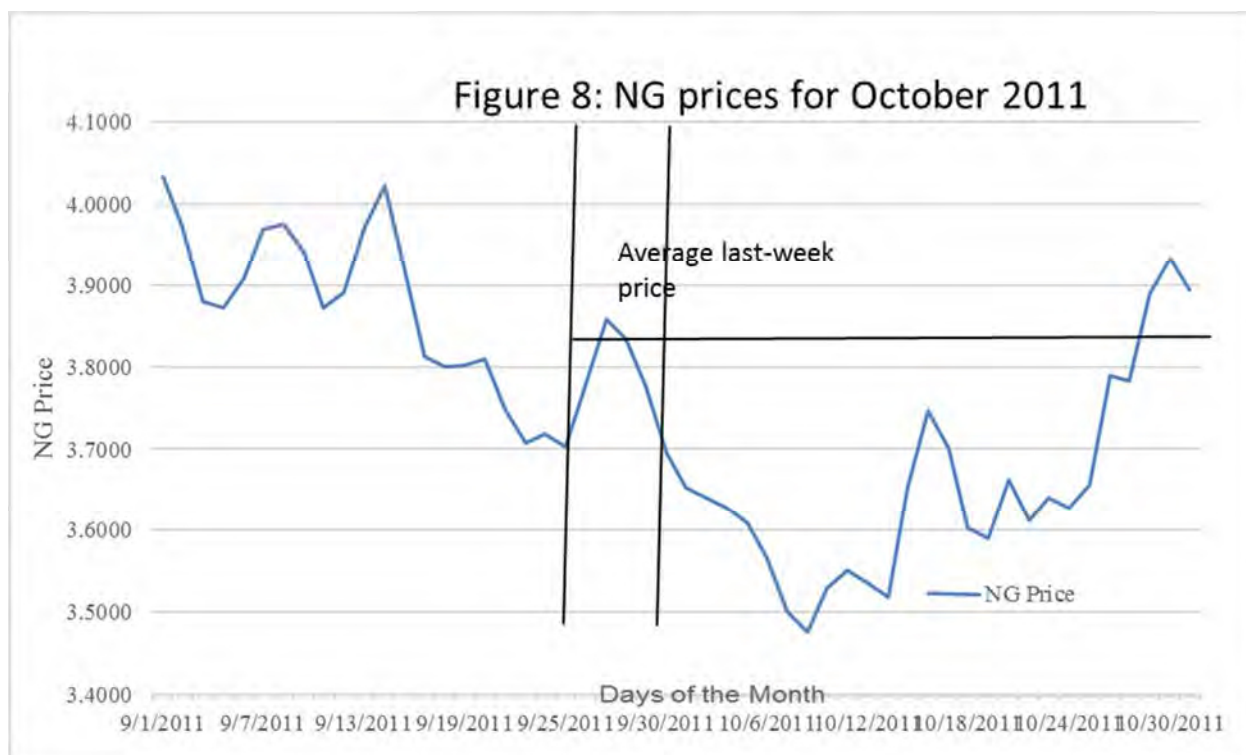
109. Figures 7 and 8 show the pattern of prices during September and October 2011 for Henry Hub and NG futures prices. Figure 7 shows Henry Hub prices around October bid week. Henry Hub price started the month of September at \$4.18. The prices of Henry Hub gas contracts declined during September and further in October 2011. During September, Henry Hub prices averaged \$3.90. During the last five-trading-days of September 2011 (October bid-week), Henry Hub prices averaged \$3.81. Starting on October 1, 2011, Henry Hub prices declined to as low as \$3.40 and they averaged \$3.57 during October 2011. Compared to the last week of September, October 2011 Henry Hub prices declined only about \$0.24.

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<sup>10</sup> On the *day before the front month contract expires*, the front and second months settle to the VWAP of the outright CME Globex trades executed between 14:28:00 and 14:30:00 ET, the settlement period, rounded to the nearest tradable tick. On the *day of expiration*, the front (expiring) month will settle based on the VWAP of the outright CME Globex trades executed between 14:00:00 and 14:30:00 ET, and the second month will settle based on the VWAP of the outright CME Globex trades executed between 14:28:00 and 14:30:00 ET. See Henry Hub Natural Gas Futures Contract Specs, (<http://www.cmegroup.com/confluence/display/EPICSANDBOX/Natural+Gas>).



110. Figure 8 shows a similar pattern using NG futures prices around September and October 2011, which started out at \$4.03 on September 1, 2011. The prices of the NG contract during October bid week (the last five days of September 2011), are used to compute a “last-week” price. Figure 8 also indicates an overall decline in NG prices during September and through the middle of October 2011. Figure 8 also shows that the bid-week price was artificially run up to \$3.79, an increase from \$3.72 around September 23. Thus, TGPNA’s bid-week manipulation as outlined in the CFTC Order also resulted in an artificially inflated NG price. After the bid-week manipulation, starting on October 1, 2011, NG futures prices also declined during the rest of October 2011 to below \$3.50 and averaged about \$3.65. However, this represents a decline of only about \$0.14 from the “bid-week” average price.



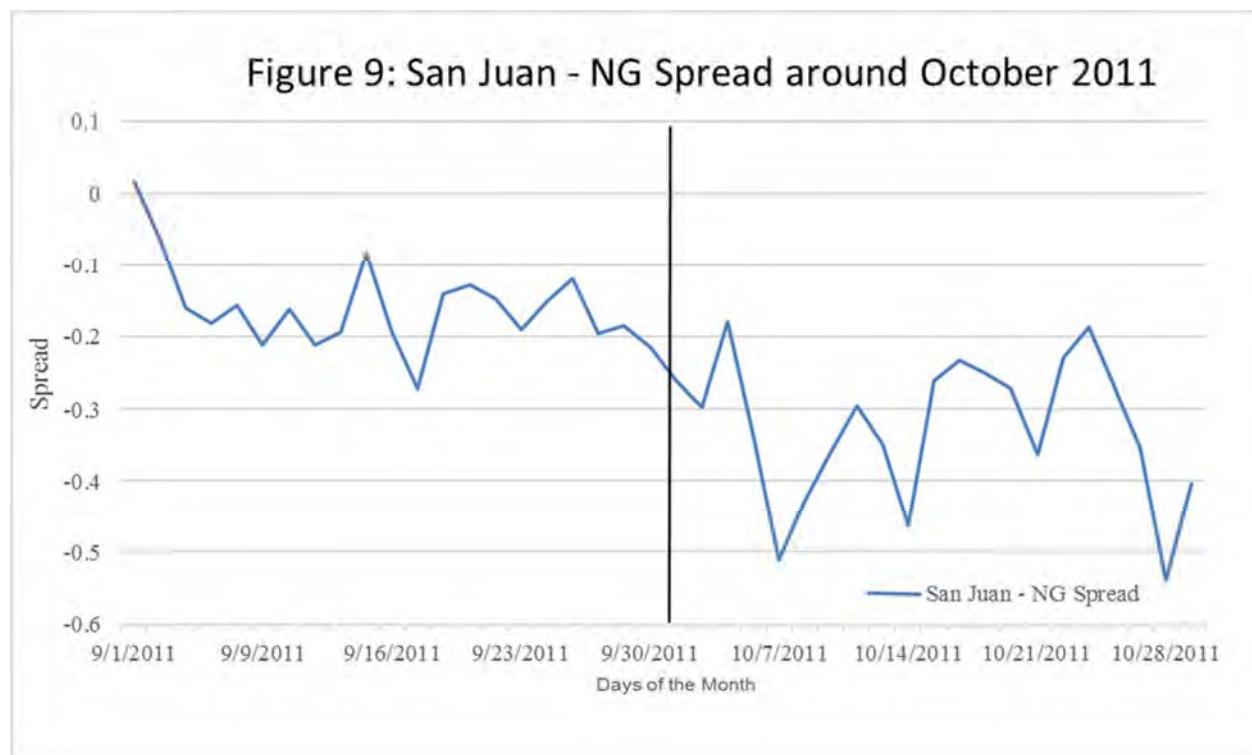
111. It is worth noting that while San Juan, Henry Hub and NG prices declined during September 2011 - October 2011, they did not all decline by the same amounts. These differences account for the movements in the San Juan – NG spread, further discussed below.

112. The price comparisons in Figures 6 to 8 demonstrate that TGPNA succeeded in manipulating San Juan natural gas prices downward. Given its short print position in San Juan, this represents successful manipulation. TGPNA also manipulated Henry Hub prices as well as NYMEX NG prices during October 2011 bid week and the price trend continuing into the middle of October 2011.

113. Finally, Figure 9 shows the spread between San Juan and NYMEX NG prices. In early September, the spread was a positive \$0.02. During September 2011, the spread averaged about \$-0.16, a decline of about \$0.18. At the end of September 2011, the spread stood at -\$0.22. During October 2011, the spread declined further. During October 2011 the spread averaged

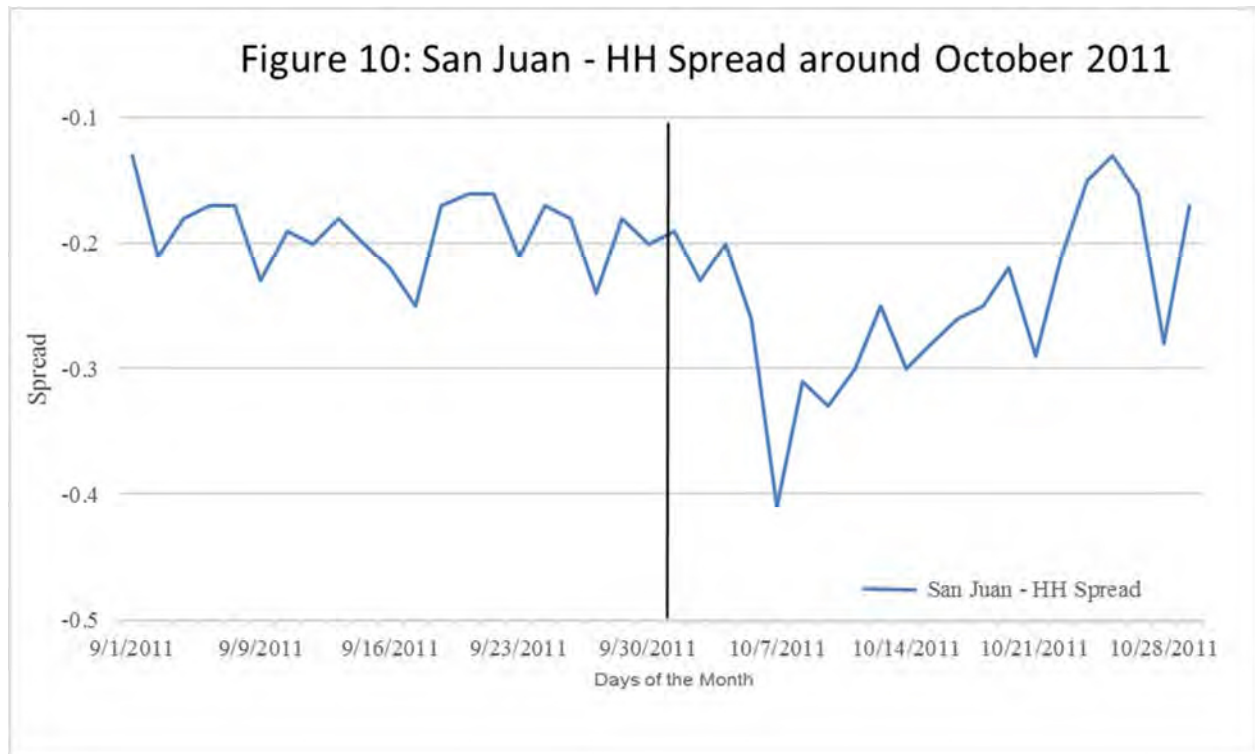
only  $-\$0.33$ , or a decline of additional  $\$0.17$ . At the end of October 2011, the spread stood at  $-\$0.40$ . This result is consistent with the TGPNA strategy of narrowing the spread between NG and San Juan prices. Consequently, this evidence further corroborates the conclusion that TGPNA was successful in manipulating both prices, San Juan, and NG prices.

114. The spread between San Juan and NG during October bid-week (September 26-30) equaled  $-\$0.25$ . Five trading days earlier this spread averaged  $-\$0.18$ . Once again, the spread narrowed in favor of TGPNA during the bid-week, consistent with TGPNA's short position at San Juan. TGPNA's short position, including any financial basis swap between San Juan and NYMEX, benefitted from these artificial price movements.



115. As stated above, an alternative avenue available to TGPNA to benefit its short position at San Juan is to ensure that Henry Hub prices do not fall as much as the San Juan price. This will help benefit their financial basis swap trade positions between San Juan and Henry Hub

as outlined above. To explore this avenue, the Consulting Expert examined the spread between San Juan prices and Henry Hub (HH) prices. The result is shown in Figure 10.



116. Figure 10 shows the spread between San Juan and Henry Hub, during September-October 2011. As can be seen, the spread remains fairly constant near  $-\$0.20$  for much of September 2011. Starting on October 6, the spread becomes significantly more negative and falls below  $-\$0.40$  by October 7. The spread then recovers back to around  $-\$0.20$  for the next bid-week and averages about  $-\$0.25$  for the entire month of October 2011.

117. Figure 10 is also consistent with manipulative activity that benefits the short position in San Juan. Figure 10 indicates that Henry Hub prices also did not fall as much as the San Juan prices during October 2011, therefore narrowing the spread between San Juan and Henry Hub further. Narrowing the spread between San Juan and Henry Hub also helps narrow the spread between San Juan and NYMEX as demonstrated earlier.

118. The spread between San Juan and Henry Hub during October bid-week (September 26-30) equaled -\$0.194. Five trading days earlier this spread averaged -\$0.19. Thus, the spread narrowed in favor of TGPNA during the bid-week, consistent with TGPNA's short position at San Juan. TGPNA's short position at San Juan, including any financial basis swap between San Juan and Henry Hub, benefitted from these artificial price movements.

### **3. Consulting Expert's Analysis of March 2012 Bid-Week**

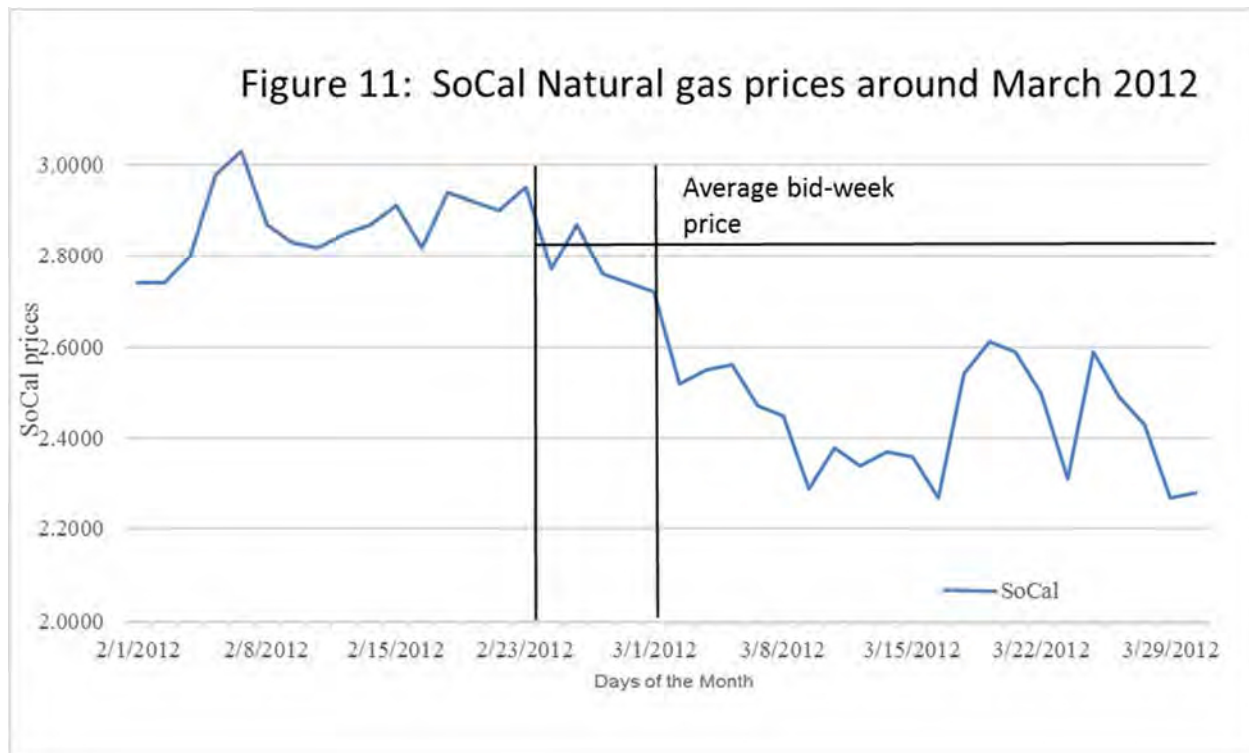
119. The CFTC Order also states that for March 2012 trading, TGPNA established a short print risk position of 100,028 MMBtus/day at SoCal as of February 23, 2012 which is also the first day of the bid-week for March 2012. CFTC Order then states that "During the bid-week, Tran encouraged another West Desk trader to execute fixed-price trades in a manner that was intended to benefit TGPNA's related short financial position established by the west Desk prior to bid-week. Tran also executed some fixed price trades during bid-week."<sup>11</sup>

120. Figures 11-15 show the pattern of prices discussed in the CFTC Order around – February-March 2012. Figure 11 shows that starting from \$2.74, during February 2012, SoCal prices were first pushed up then pushed down and they averaged \$2.86 for the entire month of February. During March bid-week (February 23-29), SoCal prices averaged \$2.82. During the month of March 2012, TGPNA then successfully drove down the SoCal spot prices to an average of \$2.45, or a drop of a whopping \$0.37 from the bid-week price. This result again demonstrates that TGPNA was indeed successful in manipulating natural gas prices around March 2012 to benefit TGPNA's prior established a short position at SoCal and NYMEX NG position during the bid-week of 2012. If TGPNA used a financial index swap contract to establish this short position, then the subsequent decline in daily SoCal prices would be highly profitable for

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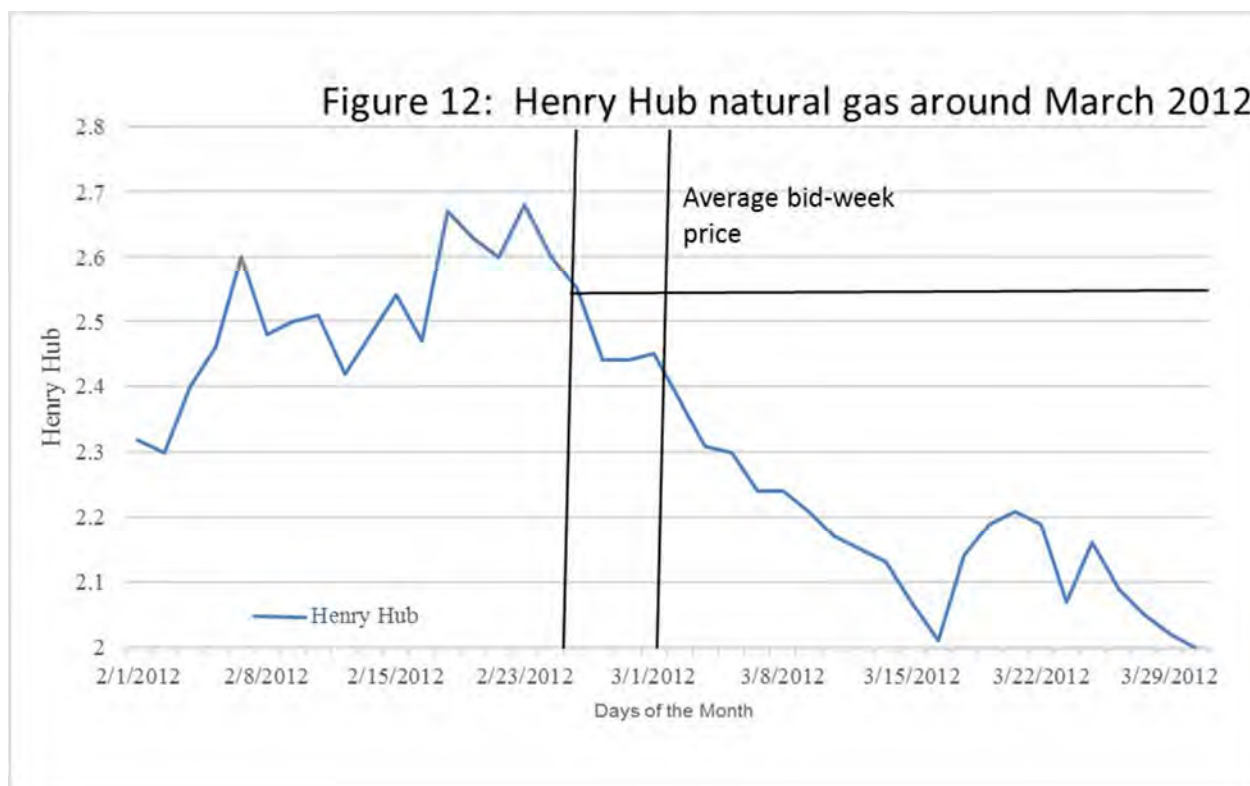
<sup>11</sup> See CFTC Order at 6.

TGPNA. An additional tool available to TGPNA is to establish such a short position using financial basis swaps. Alternatively, TGPNA could have taken a short position in a financial index swap in SoCal and a long position in a financial index swap at Henry Hub. These issues are examined next.



121. Figure 12 shows the pattern of natural gas prices at Henry Hub. Similar to SoCal price, Henry Hub prices started rising from \$2.32 at the beginning of February 2012 to \$2.68, on February 23 and then declined to \$2.44 at the end of February 2012. During March 2012, Henry Hub natural gas prices decline to \$2.00 by the end of March 2012. Compared to February 2012, March prices represent a decline of about \$0.33.

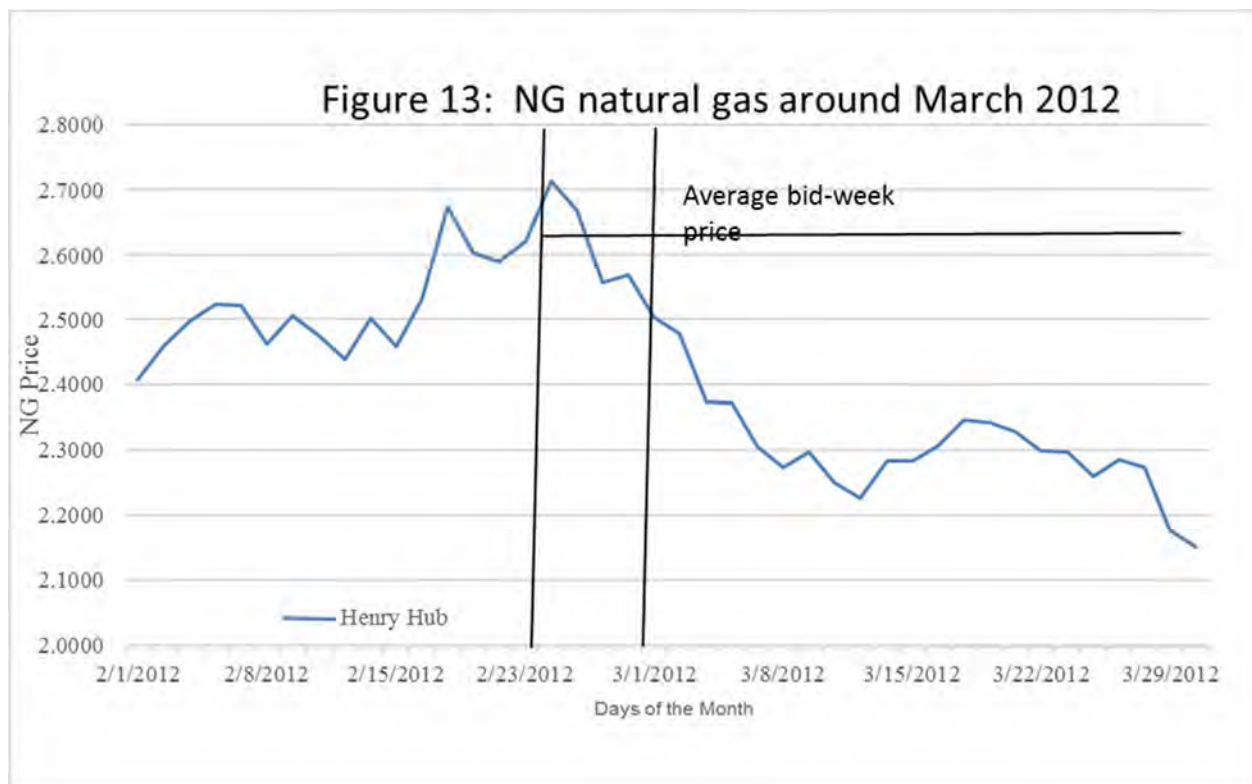




122. Figure 13 shows the pattern of NG futures prices traded on CME Globex and NYMEX around February-March 2012. Figure 13 indicates that NG futures prices were run-up from a low \$2.41 at the beginning of February 2012 to a high of about \$2.71 by February 24. During the last-week of February (March bid-week), the average price was established at \$2.63. Starting with March 1, 2012, NG prices did decline. The daily prices during March 2012 averaged to \$2.31, representing a decline of about \$0.32 from the bid-week price.

123. While SoCal, Henry Hub and NG prices declined during March 2012, they did not all decline by the same amounts. These differences account for the movements in the Social – NG spread, discussed below.



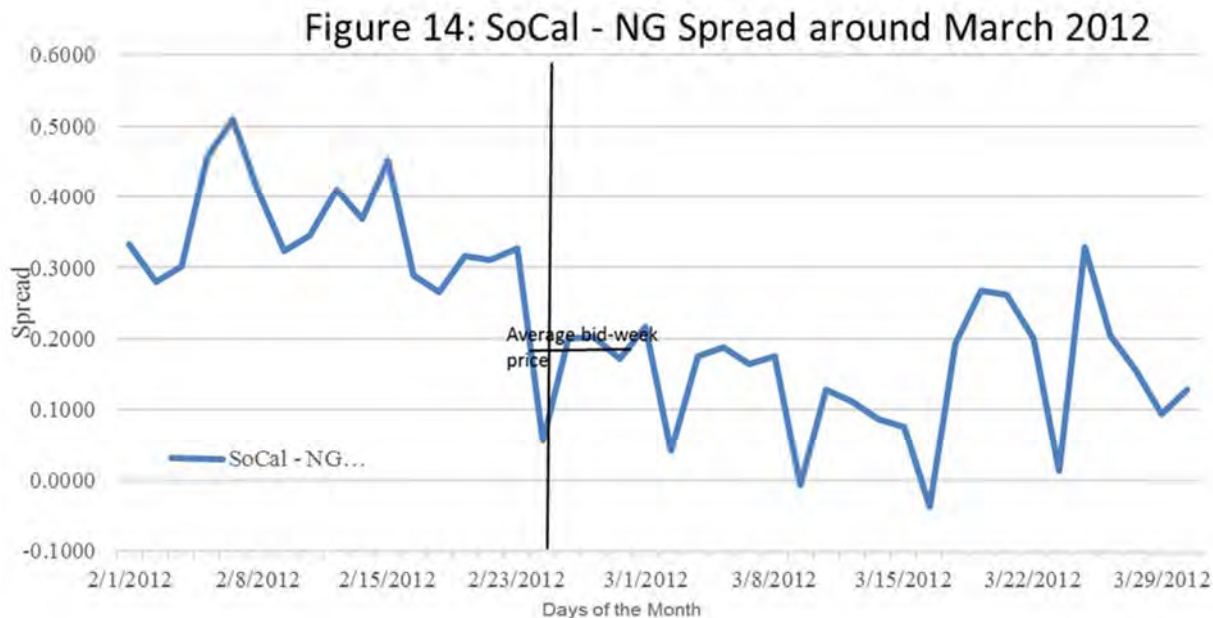


124. The CFTC Order explicitly states that “Tran’s and the West Desk’s trader’s fixed-price trades combined for approximately 53% of the total ICE market volume traded as SoCal during the bid-week. Respondents’ bid-week trading was ultimately intended to benefit TGPNA’s short financial position held at SoCal **by narrowing the spread between the NYMEX settlement price and the monthly index price at SoCal.**”<sup>12</sup> This language indicates that at least some of the short position at SoCal involved financial basis swaps with an exposure to NYMEX prices. By narrowing of the spread between NYMEX and SoCal, TGPNA would have benefitted a number of its financial positions. One position is a financial basis swap between SoCal and NYMEX. A second position is a short financial index swap at SoCal and a long financial index swap at Henry Hub.

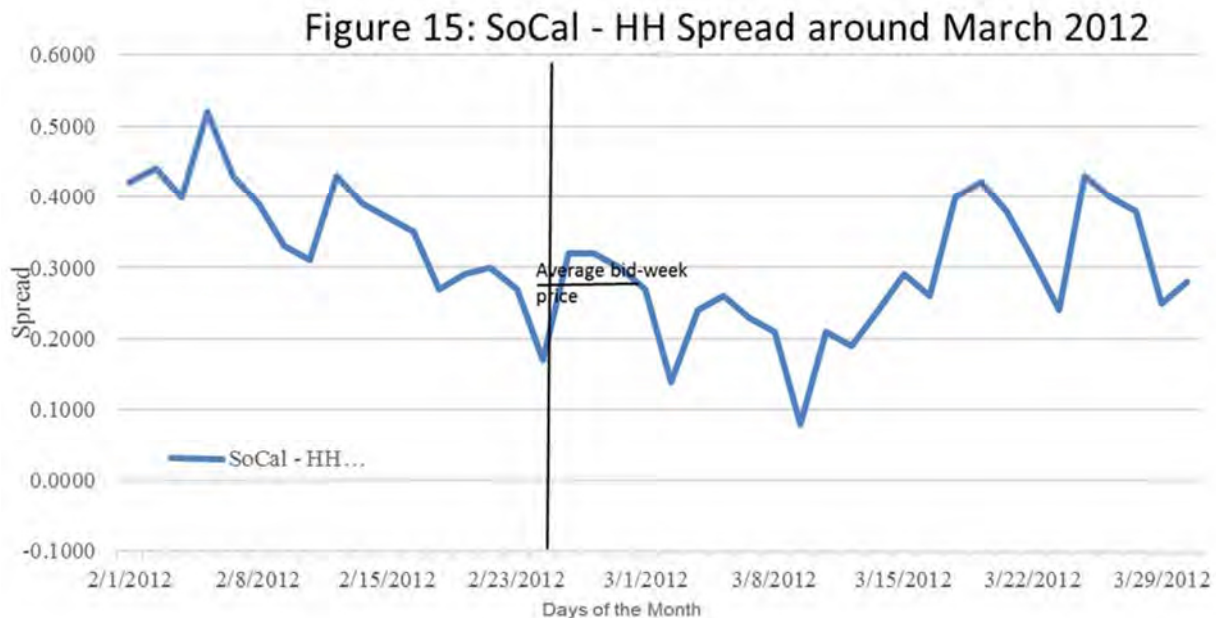
<sup>12</sup> See *id.*

125. As set forth in Figure 14 below, the SoCal-NYMEX NG spread movement shows that TGPNA was successful in its attempt to manipulate and narrow the spread as stated in CFTC Order. In early February, the spread was a positive \$0.332. During the entire month of February 2012, the spread averaged about \$0.316, a decline of about \$0.016. At the end of February 2012, the spread stood at \$0.17. For March bid-week (February 23-29), the spread was at \$0.19.

126. During March 2012, the spread declined further. During March 2012, the spread averaged only \$0.145 or a decline of additional \$0.17 from the February average or about \$0.05 decline from the bid-week average. At the end of March, the spread stood only at \$0.129. This result is consistent with the TGPNA strategy of narrowing the spread between NG and SoCal prices. Consequently, this evidence further corroborates the conclusion that TGPNA was successful in manipulating prices in order to influence both the SoCal monthly index and NYMEX NG settlement prices around March 2012. The spread between SoCal and NG during March bid-week (February 23-29) equaled \$0.19. Five trading days earlier this spread averaged \$0.33. Once again, the spread narrowed in favor of TGPNA during the bid-week, consistent with TGPNA's short position at SoCal. TGPNA's short position, including any financial basis swap between SoCal and NYMEX, benefitted from these artificial price movements.



127. As stated earlier, an alternative avenue available to TGPNA to benefit its short position at SoCal is to ensure that Henry Hub prices do not fall at much as the SoCal price. This will help benefit their financial basis swap trade positions as outlined above. TGPNA could have also taken a short financial index swap at SoCal and a long financial index swap at Henry Hub. To explore this avenue, we examine the spread between SoCal prices and Henry Hub prices. This evidence is shown in Figure 15.



128. The spread between SoCal and Henry Hub (HH) during March bid-week (February 23-29) equaled \$0.28. Five trading days earlier this spread averaged \$0.32. Once again, the spread narrowed in favor of TGPNA during the bid-week, consistent with TGPNA's short position at SoCal. TGPNA's short position, including any financial basis swap between SoCal and HH, benefitted from these artificial price movements.

129. Figure 15 shows the spread between SoCal and Henry Hub, during February-March 2012. The spread averaged about \$0.35 for the month of February. Starting in March, the spread began to decline and fell to as little as \$0.08, and then rising again for the next bid-week, averaging about \$0.29 for the entire month on March.

130. Once again, Figure 15 is consistent with manipulative activity that benefits the short position in SoCal. Figure 15 indicates that Henry Hub prices did not fall as much as the SoCal prices during March, therefore narrowing the spread between SoCal and Henry Hub

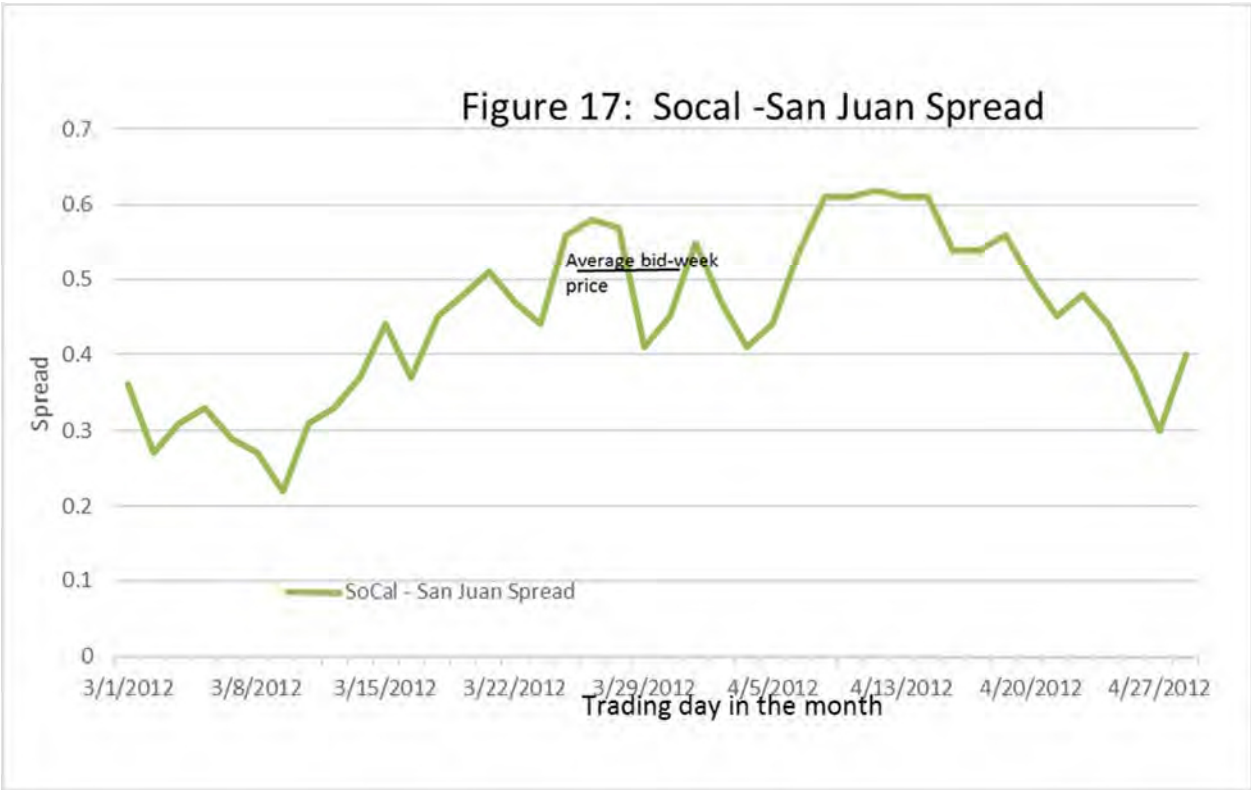
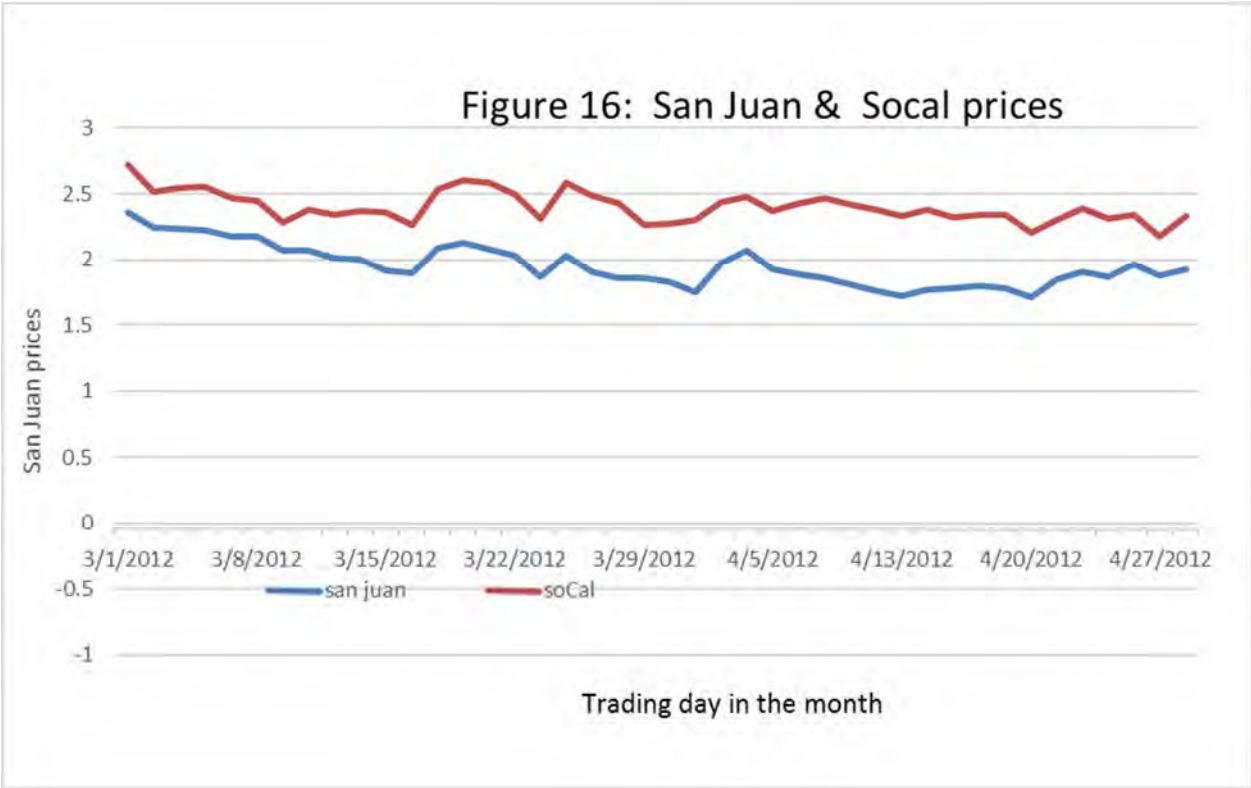
further. Narrowing the spread between SoCal and Henry Hub also helps narrow the spread between SoCal and NYMEX as demonstrated earlier.

#### **4. Consulting Expert's Analysis of April 2012 Bid-Week**

131. According to the CFTC Order, TGPNA established a long print risk position of 306,658 MMBtus/day at Socal and a short print risk position of 306,097 MMBtus/day at San Juan as of March 26, 2012, which is the first day of bid-week for April 2012. TGPNA then conducted fixed-price transactions during bid week to benefit this short position.

132. Figures 16 and 17 show the pattern of prices and the spread between SoCal and San Juan during March-April 2012. As can be seen from these figures, the natural gas prices during April bid-week moved in favor of TGPNA's print risk position, thus benefiting TGPNA.

133. Before the bid-week, the spread between Socal and San Juan stood at \$0.44. During the five trading days last from March 19-23, the spread averaged \$0.47. In contrast, during the April bid-week (March 23-30), the spread rose to \$0.51, which is consistent with TGPNA's print risk position. This price movement is consistent with increasing spread between SoCal and San Juan as stated in CFTC Order and thus represents a successful manipulation of natural gas prices and related derivative contract prices during April 2012 bid-week by TGPNA.

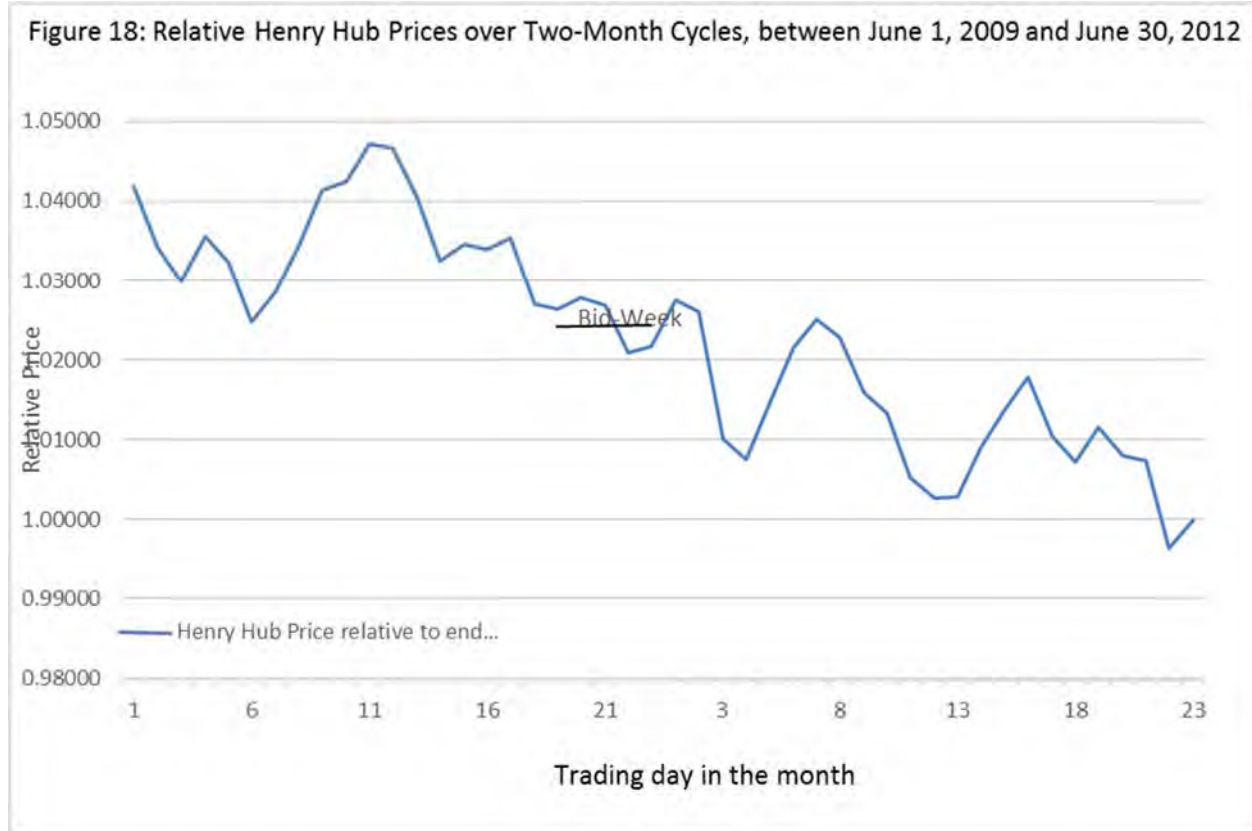


134. The factual findings in the CFTC Order are clearly confirmed by evidence of artificial price movements in the relevant hubs as well as in NYMEX futures prices, which are inextricably linked to Henry Hub prices. The overall trends and pricing patterns show that the manipulation was not limited to the hub prices, and are consistent with more wide-spread manipulation that affected prices for Natural Gas spot and futures prices.

**5. Consulting Expert's Finding of Artificiality of Bid-Week Pricing Patterns During the Class Period**

135. The next set of tests investigates whether similar patterns of manipulation occurred during the entire Class Period from June 1, 2009 to June 30, 2012 on a consistent basis. This evidence is shown in Figure 18 using Henry Hub prices.

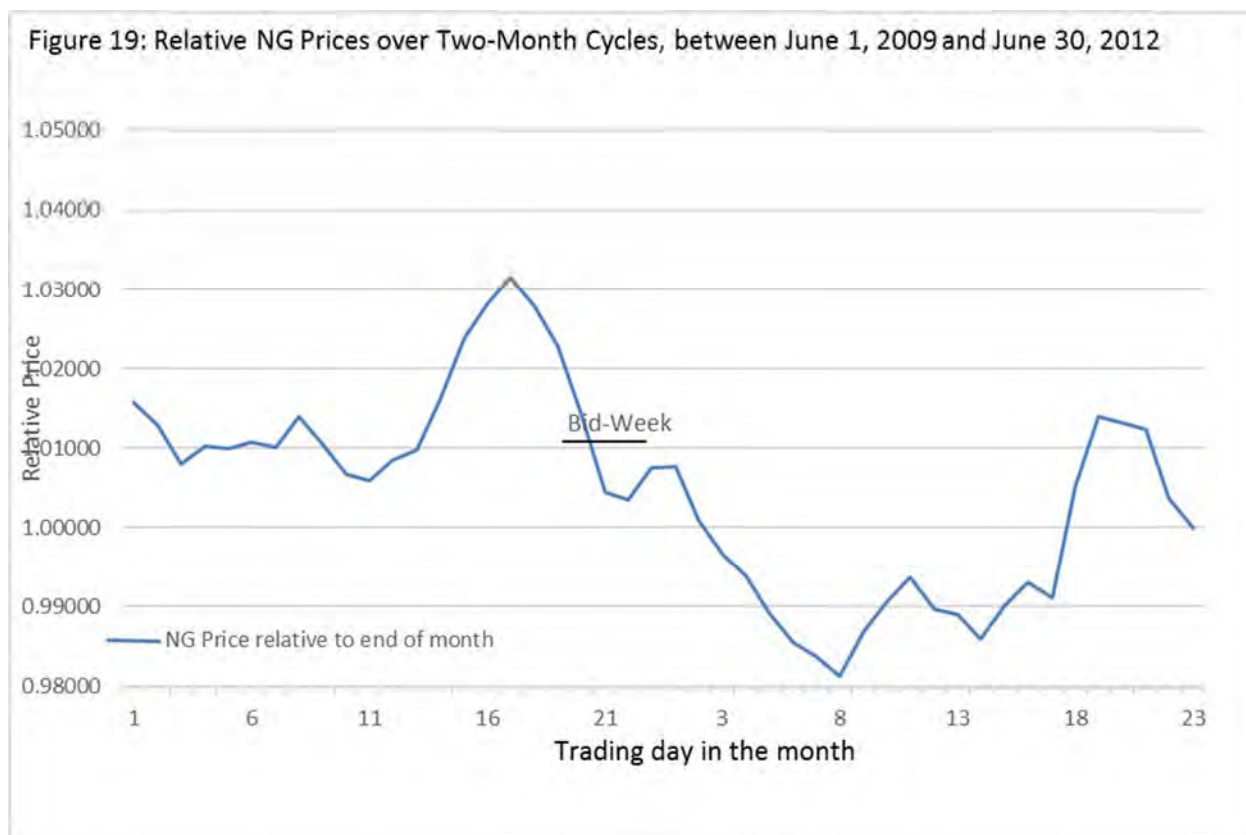
136. For the entire Class Period, Figure 18 indicates that average Henry Hub natural gas prices established during the bid-week (last week of the month) tend to be higher than the first three weeks of the delivery months. On a relative basis, natural gas futures prices decline for about six days at the beginning of each month. Thereafter, Henry Hub natural gas prices are driven up. Starting with the first of the delivery month, Henry Hub prices are again driven down. The price falls about 2.5% during the delivery month.



137. The next set of tests investigates whether similar patterns of manipulation occurred during the Class Period from June 1, 2009 to June 30, 2012 on a consistent basis using NG prices.

138. For the entire Class Period, Figure 19 indicates that average NG natural gas prices established during the bid-week (last week of the month) also tends to be higher than the first three weeks of the delivery months. On a relative basis, natural gas futures prices decline during the beginning of each month. Thereafter, NG natural gas prices are driven up. Starting with the first of the delivery month, NG prices are driven down. The price falls about 3% during the early part of delivery month and then it recovers a bit.



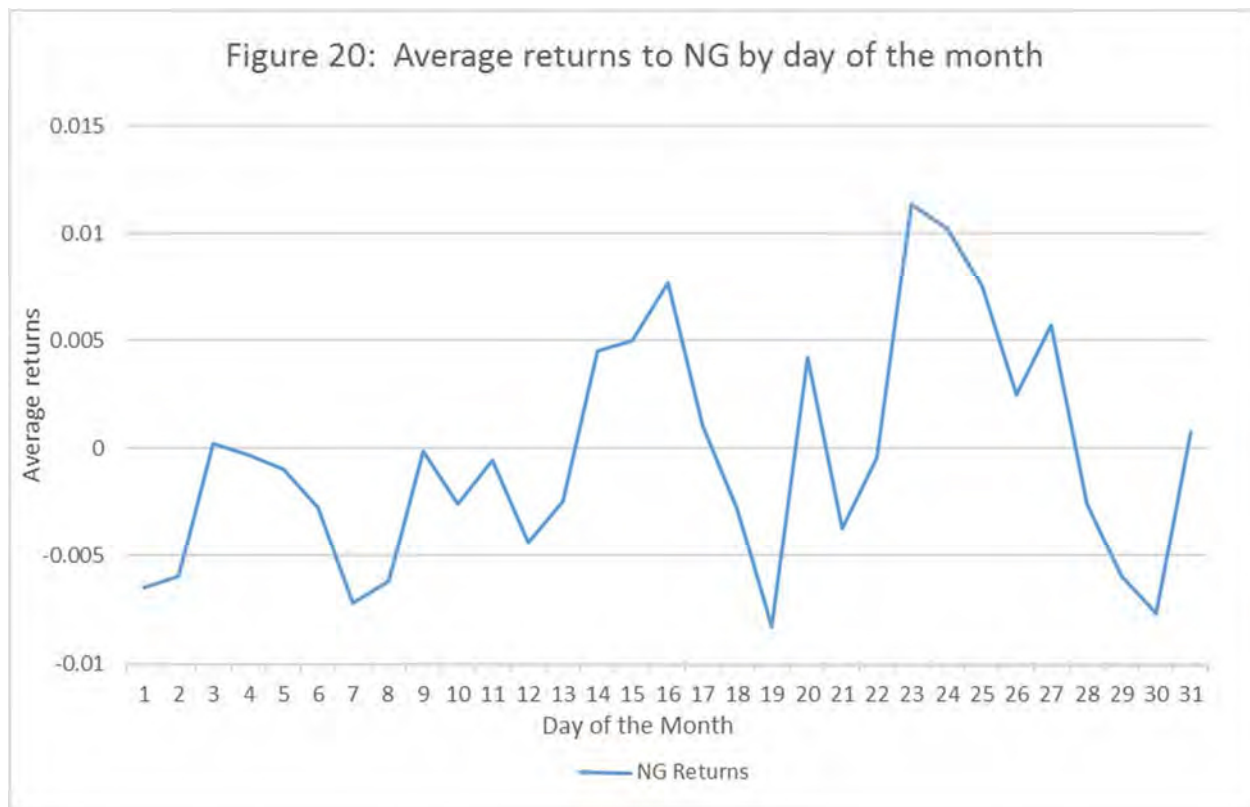


139. An immediate implication of this pattern of prices in Figures 18-19 is that establishing short financial index swap contracts (*i.e.*, receiving the delivery price of natural gas contracted during the last-week prices and paying the average spot price during the delivery month) would have been highly profitable for TGPNA. This evidence represents a generalization of the price patterns found for October 2011 and March of 2012 and indicates that the patterns for October 2011 and March 2012 are far from isolated incidents. These patterns exist for both Henry Hub prices as well as NG prices. Thus, this analysis is consistent with FERC's assessment that manipulation occurred at least 38 times during a three-year period between June 2009 and June 2012 for both Henry Hub and NG prices.

140. As an additional test of the manipulation of natural gas prices, Figure 20 shows the day-to-day average returns to NG prices for each day of the month during the Class Period.

Figure 20 also demonstrates that NG prices tend to decline at the beginning of the month and they tend to recover toward the end of the month. On average, the returns tend to be negative early in the month and they tend to be positive toward the end of the month.

141. As an additional test of these patterns, statistical analysis was performed to determine whether the pattern of average returns shown in Figure 20 could be attributed to random factors or whether they are statistically significant. Statistical tests show that the average returns during the last week of each month (between 24<sup>th</sup> and 31<sup>st</sup> days), were positive. Furthermore, among all four weeks, the average returns for the last week was the most positive. On average, the daily return during the last week of the month was about 0.5% higher than the average returns for the first week of the month, which was negative. The difference in average returns between the first week and last week was statistically significant at the 5% level. This finding further corroborates the conclusion that these patterns in returns are consistent with manipulation and cannot be attributed to random factors.



142. Finally, the relationship between NG prices and Henry Hub prices was analyzed statistically. This analysis confirms a strong, statistically significant relation between changes in Henry Hub prices and NG prices during the Class Period. This analysis further corroborates the conclusion that any manipulation of Henry Hub prices during the Class Period would be expected to affect NG prices, as well as the converse.

#### **THE RELEVANT MARKET**

143. The relevant market in this case is the natural gas market comprised of: (1) the physical natural gas market in major trading locations in the southwestern, Texas and Louisiana regions of the United States whose prices are used as market benchmarks for many products, both physical and derivative, including: the El Paso Natural Gas Co., Permian Basin (“Permian”), El Paso San Juan Basin (“San Juan”), Southern California Gas Co. (“SoCal”), and West Texas, Waha (“Waha”), and the Henry Hub in Erath, Louisiana (“Henry Hub”); and (2)

NYMEX Natural Gas futures and options contracts; ICE natural gas futures and options contracts; natural gas financial swaps; and other natural gas derivatives.

### **EQUITABLE TOLLING AND FRAUDULENT CONCEALMENT**

144. By its very nature, the unlawful activity, alleged herein, that TGPNA engaged in was self-concealing. Plaintiffs could not in the exercise of due diligence have discovered TGPNA's wrongdoing as alleged herein. Because TGPNA's manipulative behavior was self-concealing and it took further active steps to conceal the unlawful behavior, Plaintiffs and Class Members remained unaware of the violation during the limitations period. Moreover, in many transactions, especially exchange-based transactions, Plaintiffs and Class Members would have no way of knowing who were their trading counterparties.

145. Because TGPNA employed acts and techniques that were calculated to wrongfully conceal the existence of such illegal conduct, Plaintiffs and the Class could not have discovered the existence of this unlawful conduct any earlier than the public disclosure of the FERC investigation in September 2015. Even after news of FERC's investigation into TGPNA's manipulation of the price of natural gas in the U.S. became public, on September 22, 2015, *The Wall Street Journal* reported that TGPNA's parent company denied the accusations and issued a written statement saying that it was convinced that no Total employee "committed any of the FERC's allegations".

146. Due to TGPNA's fraudulent concealment, any applicable statute of limitations affecting or limiting the rights of action by Plaintiffs or members of the Class has been tolled during the period of such fraudulent concealment.

### **CLASS ALLEGATIONS**

147. Plaintiffs bring this action on behalf of themselves, and all others similarly situated, as a class action pursuant to Rule 23 of the Federal Rules of Civil Procedure ("FRCP").

The Class consists of:

All persons who, between June 1, 2009 and June 30, 2012 (inclusive), purchased and/or sold artificially priced, as described herein, physical, financial or other derivative natural gas contracts either over-the-counter, on an electronic platform, or on an exchange, where such persons were either domiciled in the United States or its territories or, if domiciled outside of the United States or its territories, entered into one or more physical, financial or other derivative natural gas contracts in the United States or its territories, or on a U.S. exchange. Excluded from the Class are the Defendants and any parent, subsidiary, affiliate, or agent of any Defendant.

148. FRCP Rule 23(a)(1). Class members number in the hundreds or, perhaps, thousands, and are geographically dispersed such that joinder is impractical.

149. FRCP Rule 23(a)(2). Common issues of fact and law include but are not limited to:

- a. Whether Defendants manipulated natural gas prices in violation of the CEA;
- b. Whether Defendants are liable under the CEA for such manipulation;
- c. Whether Defendants are vicariously liable for such manipulation;
- d. Whether Defendants manipulated natural gas prices in violation of antitrust laws;
- e. Whether Defendants are liable under the antitrust law for such manipulation;
- f. Whether such injury or the extent of such artificiality may be established by common, class-wide means, including, for example, by regression analysis, econometric formula, or other economic tests;
- g. Whether Defendants unjustly enriched themselves or are otherwise responsible for disgorgement/restitution under the common law;
- h. The operative time period and extent of Defendants' violations; and
- i. The appropriate relief.

150. Rule 23(a)(3). Plaintiffs' interests are typical of, and not antagonistic to the interests of, the Class.

151. Rule 23(a)(4). Plaintiffs are not antagonistic to the Class, is an adequate class representative, and has retained adequate counsel.

152. Rule 23(b)(3). Common issues predominate over individual issues (if any). A class action is superior to other methods (if any) for a fair and efficient adjudication of this case. Indeed, a class action is the only method by which Plaintiffs and the Class can efficiently seek redress because of “negative value” claims. The records of commodity futures traders are required to be maintained by FCMs (futures commission merchants). Plaintiffs do not anticipate any difficulties in the identification of Class members, notice to Class members or other aspects of the management of this action as a class action.

**FIRST CLAIM FOR RELIEF  
(Manipulation In Violation of the  
Commodity Exchange Act, 7 U.S.C. §§ 1, *et seq.* and Rule 180.2)  
Against Defendant TGPNA**

153. Plaintiffs re-allege and incorporate all allegations with the same force and effect as if fully restated herein.

154. Defendant TGPNA through its acts alleged herein, including the acts of its agents Therese Tran and Aaron Hall, specifically intended to and did cause unlawful and artificial prices of natural gas, natural futures and option contracts, and natural gas swaps in violation of the CEA, 7 U.S.C. §§ 1, *et seq.*

155. As alleged herein, Defendant TGPNA traded substantial physical natural gas contracts and financial derivatives tied to natural gas. Defendant TGPNA knowingly and recklessly executed physical fixed-price trades during bid-week to influence monthly index settlement prices of natural gas at four major trading locations in the United States. TGPNA knew, as a sophisticated market participant, that the trading information it provided during bid-week directly impacted the prices of natural gas futures and option contracts, natural gas

financial swaps and other natural gas derivative contracts traded in the U.S. and elsewhere. Through the conduct alleged herein, Defendant TGPNA intentionally and recklessly caused prices of natural gas and natural gas futures and options contracts and financial swaps to trade at artificial levels. This manipulation had the effect of benefitting Defendants' positions in natural gas derivative contracts, including basis swap and index swap positions.

156. As a major natural gas market participant, Defendant TGPNA had the motive and financial incentive to manipulate natural gas prices through contrived reports of physical trades to Platts, NGI and other trade publications. Such manipulation enhanced the value of Defendant's financial and derivative positions to the detriment of Plaintiffs. Defendant TGPNA's trading and other participation in the financial, derivative and physical natural gas market is connected with or based on prices of natural gas.

157. During the Class Period, TGPNA traded substantial volumes of physical natural gas at four specific trading locations that were tied to pricing indices for natural gas. TGPNA provided information of these trades to Platts, NGI and other trade publications.

158. Defendant TGPNA's large fixed price trading during bid-week allowed it to enjoy access to critical and valuable nonpublic information that was not available to the physical and financial natural gas markets at large. Defendant TGPNA exploited this asymmetry of information to the disadvantage of other market participants, including traders in futures, options, swaps and other derivatives contracts.

159. As holders of this advantageous non-public information, Defendant TGPNA was well positioned to and did influence the market. For example, trade publications factored in the reported volumes of both TGPNA's and its counterparties' natural gas trades in estimating the total fixed-price volume traded during bid-week. Defendant TGPNA used this power, coupled

with its ability to influence the index pricing process, to manipulate natural gas prices and to manipulate the price of natural gas futures, options, swaps and other derivatives contracts.

160. For TGPNA, its motivation to create a large presence in the physical price setting market during bid-week was to benefit short financial positions held at specific trading hubs and to narrow the spread between the NYMEX settlement price and the monthly index price at the trading hub related to its financial position. Trading desk managers at TGPNA directed traders to execute fixed-price trades in a manner that was intended to benefit TGPNA's related financial positions.

161. By its intentional misconduct, Defendant TGPNA violated Section 9(a)(2) of the CEA, 7 U.S.C. § 13(a)(2), and caused prices of natural gas and natural gas futures, options, swaps and other derivatives contracts to be artificial during the Class Period. Defendant TGPNA through its acts alleged herein, which occurred between at least June 2009 and June 2012, specifically intended to and did cause unlawful and artificial prices of natural gas, NYMEX Natural Gas futures and options contracts, ICE natural gas futures contracts and ICE natural gas swaps contracts in violation of CEA, 7 U.S.C. §§ 1, *et seq.* and Rule 180.2, 17 C.F.R. § 180.2.

162. Defendants' trading and other activities alleged herein constitute market power manipulation of the prices of natural gas futures and other derivatives contracts in violation of Sections 6(c)(3), 9(a) and 22(a) of the CEA, 7 U.S.C. §§ 9(3), 13(a) and 25(a), and CFTC Rule 180.2, 17 C.F.R. § 180.2.

163. Defendant's foregoing extensive manipulative conduct deprived Plaintiffs and others of a lawfully operating market during the Class Period.

164. Plaintiffs and others who transacted in natural gas futures, options, swaps and other derivatives during the Class Period transacted at artificial and unlawful prices resulting



from Defendant TGPNA's manipulations in violation of the CEA, 7 U.S.C. § 1, *et seq.*, and as a direct result thereof were injured and suffered damages.

165. Plaintiffs and the Class are each entitled to damages for the violations of the CEA alleged herein.

166. Defendant's conduct proximately caused injury to Plaintiffs and other members of the Class who transacted in an artificial and manipulated market, at manipulated prices, and with artificial price trends, during the Class Period.

167. Plaintiffs and members of the Class who purchased or sold natural gas futures, options, swaps and other derivatives contracts, including NYMEX Natural Gas futures, ICE natural gas futures, ICE natural gas swaps, and other derivatives contracts on NYMEX or ICE during the Class Period were injured and are each entitled to their actual damages for the violations of the CEA alleged herein.

**SECOND CLAIM FOR RELIEF**  
**(Manipulation by False Reporting and Fraud and Deceit In Violation**  
**of the Commodity Exchange Act, as Amended,**  
**7 U.S.C. §§ 1, *et seq.* and Rule 180.1(a))**  
**Against Defendant TGPNA**

168. Plaintiffs re-allege and incorporate all allegations with the same force and effect as if fully restated herein.

169. By their intentional and reckless misconduct, Defendant TGPNA violated Section 6(c)(1) of the CEA, as amended, 7 U.S.C. § 9(1), and caused prices of natural gas, natural gas futures and options, natural gas swaps and other natural gas derivative contracts to be artificial during the Class Period. Defendant TGPNA delivered and caused to be delivered for transmission through the mails and interstate commerce, by multiple means of communication, including communications to Platts and NGI, a false or misleading or inaccurate report concerning market information or conditions that affect or tend to affect the price of natural gas,

natural gas futures and options, natural gas swaps and other natural gas derivative contracts, which are commodities in interstate commerce, knowing, or acting in reckless disregard of the fact that such report was false, misleading or inaccurate.

170. Under Section 6(c)(1) of the CEA, as amended, codified at 7 U.S.C. § 9(1), and Section 22 of the CEA, as amended, 7 U.S.C. § 25, it is unlawful for any person, directly or indirectly, to use or employ or attempt to use or employ, in connection with any swap, or a contract of sale of any commodity in interstate commerce, or for future delivery on or subject to the rules of any registered entity, any manipulative or deceptive device or contrivance, in contravention of such rules and regulations as the CFTC, which shall promulgate by not later than 1 year after July 21, 2010.

171. In July 2011, the CFTC promulgated Rule 180.1(a), 17 C.F.R. § 180.1(a) (2011), which provides, in relevant part:

It shall be unlawful for any person, directly or indirectly, in connection with any swap, or contract of sale of any commodity in interstate commerce, or contract for future delivery on or subject to the rules of any registered entity, to intentionally or recklessly use or employ, or attempt to use or employ, any manipulative device, scheme, or artifice to defraud, make, or attempt to make, any untrue or misleading statement of a material fact or to omit to state a material fact necessary in order to make the statements made not untrue or misleading.

172. Unlawful manipulation under the CEA, as amended, and Rule 180.1 includes delivering, or causing to be delivered for transmission through the mails or interstate commerce, by any means of communication whatsoever, a false or misleading or inaccurate report concerning market information or conditions that affect or tend to affect the price of any commodity in interstate commerce, knowing, or acting in reckless disregard of the fact that such report is false, misleading or inaccurate.

173. During the Class Period, Defendants used or employed manipulative or deceptive devices or contrivances, in connection with a contract of sale of natural gas in

interstate commerce, including, but not limited to, making untrue or misleading statements of material facts, or omitting material facts necessary to make the statements made not misleading, including failing to disclose, and omitting, that they were reporting fixed-price natural gas transactions during bid-week to move natural gas prices uneconomically to benefit their derivative positions.

174. Defendant TGPNA's conduct proximately caused injury to Plaintiffs and other members of the Class who transacted in an artificial and manipulated market, at manipulated prices, and with artificial price trends, during the Class Period.

175. Plaintiffs and the Class are each entitled to damages for the violations of the CEA alleged herein.

**THIRD CLAIM FOR RELIEF**  
**(Principal-Agent Liability In Violation of the**  
**Commodity Exchange Act, 7 U.S.C. §§ 1, *et seq.*)**  
**Against Defendant TGPNA**

176. Plaintiffs re-allege and incorporate all allegations with the same force and effect as if fully restated herein.

177. Defendant TGPNA through its employees, agents and/or others directed, developed, executed and otherwise acted with respect the scheme alleged herein. Under Section 2(a)(1)(B) of the CEA, 7 U.S.C. § 2(a)(1)(B), Defendant TGPNA is liable for the acts of its employees, agents and other persons acting for it in the scope of their employment.

178. Plaintiffs and Class members are each entitled to damages for the violations alleged herein.

**FOURTH CLAIM FOR RELIEF**  
**(Violation of Section 2 of the Sherman Act,**  
**15 U.S.C. § 2)**  
**Against Defendant TGPNA**

179. Plaintiffs re-allege and incorporate all allegations of this Complaint with the

same force and effect as if fully restated herein.

180. In violation of Section 2 of the Sherman Act and Section 4 of the Clayton Act, Defendant TGPNA monopolized the physical natural gas market in major trading locations in the southwestern, Texas and Louisiana regions of the United States whose prices are used as market benchmarks for many products, both physical and derivative, including: the El Paso Natural Gas Co., Permian Basin (“Permian”), El Paso San Juan Basin (“San Juan”), Southern California Gas Co. (“SoCal”), and West Texas, Waha (“Waha”), which collectively are referred to herein as the “relevant hubs”, and the Henry Hub in Erath, Louisiana (“Henry Hub”).

181. During the Class Period, as a major market participant and contributor to Platts and NGI pricing trade publications for natural gas, Defendant TGPNA used its market power and attempted to monopolize and did monopolize the physical natural gas market in major trading locations in Permian, San Juan, SoCal, Waha and Henry Hub, including the bid-week process.

182. During the Class Period, Defendant TGPNA reported excessive trading volumes and maintained a high market share during bid-week for the Permian, San Juan, SoCal, Waha and Henry Hub trading hubs, which impacted monthly index settlement prices. TGPNA therefore also controlled prices in the market for natural gas-based derivative contracts, including futures, options, swaps and other derivatives contracts. Defendant’s unlawful price control of the physical natural gas market in major trading locations in Permian, San Juan, SoCal, Waha and Henry Hub during the Class Period reflects monopoly power. The conduct consisted of a concerted effort between and among Defendant TGPNA’s trading desks and employees in furtherance of which they created artificial prices for natural gas-based derivative contracts, including futures, options, swaps and other derivatives contracts.

183. During the Class Period, Defendant TGPNA provided Platts and NGI during

bid-week with physical transaction data based on false, inaccurate or misleading information for the purpose of affecting natural gas financial swap and other derivative prices.

184. Defendant TGPNA's conduct, and its resulting impact on the physical natural gas market in major trading locations in Permian, San Juan, SoCal, Waha and Henry Hub and related derivatives traded on NYMEX and ICE, occurred in or affected interstate and international commerce.

185. The anticompetitive effects of TGPNA's conduct far outweigh any ostensible competitive benefits or justifications.

186. Plaintiffs and members of the Class have been injured in their business or property by Defendant TGPNA's attempted monopolization and monopolization of the physical natural gas market in major trading locations in Permian, San Juan, SoCal, Waha and Henry Hub.

187. Defendant TGPNA's anticompetitive conduct had severe adverse consequences on competition and price discovery. Plaintiffs and other members of the Class that traded natural gas futures, options, swaps and other derivatives linked to the price of natural gas during the Class Period were deprived of normal, competitive trading patterns and, instead, were subjected to artificially determined prices as a result of Defendant TGPNA's unlawful and manipulative conduct. As a consequence thereof, Plaintiffs and the Class suffered financial losses and were, therefore, injured in their business or property.

188. Plaintiffs and members of the Class are each entitled to treble damages for the violations of the Sherman Act alleged herein.

#### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiffs pray for judgment against Defendants as follows:

A. For an order certifying this lawsuit as a class action pursuant to Rules 23(a) and (b)(3) of the Federal Rules of Civil Procedure and designating Plaintiffs as Class Representative and their counsel as Interim Lead Counsel for the Class;

B. For judgment awarding Plaintiffs and the Class damages and punitive damages against Defendants for their violations of the CEA, together with prejudgment and post-judgment interest at the maximum rate allowable by law;

C. For a judgment awarding Plaintiffs and the Class damages against Defendants as a result of their unlawful, anticompetitive conduct alleged herein under Section 2 of the Sherman Act;

D. For an award to Plaintiffs and the Class, plus pre- and post-judgment interest, plus their costs of suit, including reasonable attorneys' and experts' fees and expenses; and

E. For such other and further relief as the Court may deem just and proper.

#### **DEMAND FOR JURY TRIAL**

Plaintiffs hereby demand a jury trial.

Dated: March 9, 2016

#### **KIRBY McINERNEY LLP**

By: /s/ David E. Kovel

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